Radio Frequency Antennas Projects

TEDAP®

PMR
PRIVATE MOBILE RADIO

R&D ENGINEERING PROJECT PROTOTYPE WIMAX WIRELESS COMMUNICATONS RAILWAYS TRANSPORT PMR PRIVATE MOBILE RADIO TACTICAL AIR TRAFFIC CONTROL R&D ENGINEERING PROJECT PROTOTYPE WIMAX WIRELESS COMMUNICATONS RAILWAYS TRANSPORT PMR PRIVATE MOBILERADIO TACTICALAIR TRAFFIC CONTROL R&D ENGINEERING PROJECT PROTOTYPE WIMAX WIRELESS COMMUNICATONS RAILWAYS TRANSPORT PMR PRIVATE MOBILE RADIO TACTICAL AIR TRAFFIC CONTROL

POLO ITALIANO ANTENNE GUGLIELMO MARCONI

λεα LEANTENNE

TELSA

RAC

Lea Unimateria Usa S.O.L. Università di Siena

2013/2014

www.tedap.eu

TEDAP RADIO FREQUENCY ANTENNAS PROJECTS SRL IS THE EXCLUSIVE WORLDWIDE RESELLER FOR ANTENNA BRANDS

TEDAP NETWORK (RETE D'IMPRESE), with an official joint management is now a market leader in the design, production and supply of products of radio transmission equipment.

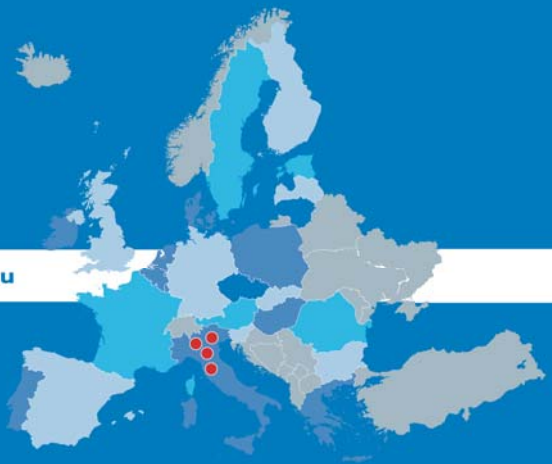
POLO ITALIANO ANTENNE GUGLIELMO MARCONI

TEDAP's portofolio serves this main market segments:

- **AIR TRAFFIC CONTROL;**
- **TACTICAL;**
- **PMR PRIVATE MOBILE RADIO;**
- **RAILWAYS / TRANSPORT;**
- **WIMAX / WIRELESS COMMUNICATIONS;**
- **R&D ENGINEERING / PROJECT / PROTOTYPE.**

TEDAP has BRANCHES across Europe: for this reason, we are sure that professional radio operators and system integrators will find the best solution to any of their needs in our wide range of catalogue offers.
Per i mercati più importanti avremmo una joint commerciale (**TEDAP DOMESTIC**) con i partners locali tecnici / commerciali.
All **TEDAP** products can be made and/or readapted anyway to the needs or the specific requests of our Clients. **TEDAP**'s European vision in the communications market enables our clients to appreciate our results in research, thanks to trials and creativity, which underlie our wide production range. All **TEDAP** products are the result of the cooperation between experts from universities and multinational companies. **TEDAP**'s production process is fully "made in Europe": it guarantees the top quality of its components, precise manufacturing and attention to detail, in order to meet the need for high quality and durable products.
Every **TEDAP** item undergoes strict quality controls, in full compliance with the requirements of the **ISO 9001:2008 standard**.

TEDAP®



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MOBILE ANTENNAS

OMNI ANTENNAS

DIRECTIONAL ANTENNAS

PANEL ANTENNAS

ACCESSORIES
(FILTERS - DUPLEXERS)

MOBILE CUTTABLE WHIP VHF ANTENNA

66 ÷ 88 MHz

ML75

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band (MHz)	66 ÷ 88
Impedance (Ω)	50
VSWR at resonant frequency	≤1.5
Bandwidth at resonant frequency (MHz)	4
Polarization	vertical
Gain(dBb)	0
Continuous Max Power (W)	100

Mechanical Specifications

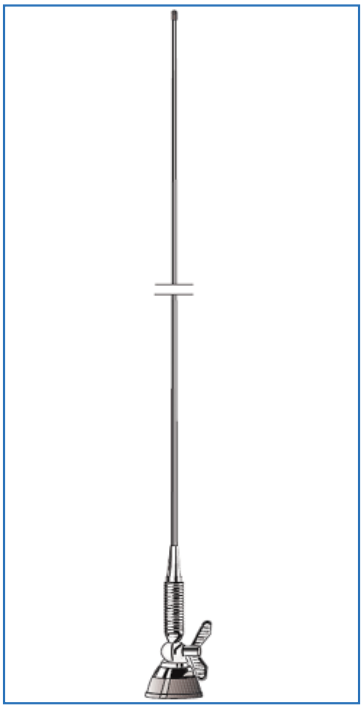
Type of connection (RG058 coaxial connection)	4.5 mt
Length of the whip (mm)	1170
Whip material	Fibreglass
Spring material	Inox steel
Mounting hole (mm)	Ø 19
Base	Waterfproof "L" mount

DESCRIPTION:

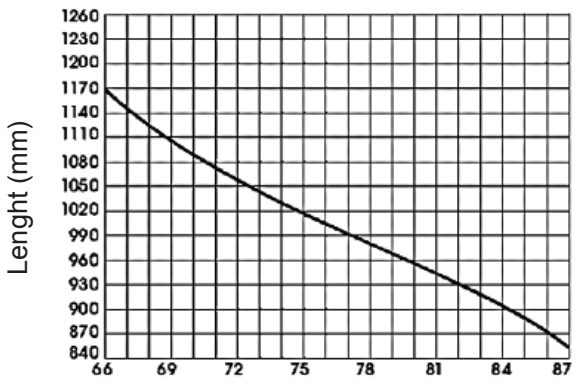
Mobile whip antenna with relative base series.

Conical fiberglass whip with inox steel spring at base.

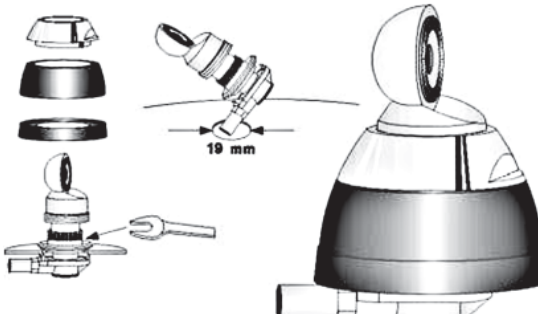
Tunable by whip cutting (see cutting diagram).



Cutting Diagram



Mounting Instructions



By λεα LEANTENNE

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MOBILE CUTTABLE WHIP VHF ANTENNA

144 ÷ 174 MHz

SL A 4M

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band (MHz)	144 ÷ 174
Impedance (Ω)	50
VSWR at resonant frequency	≤1.5
Gain (dBd)	0
Bandwidth at resonant frequency (MHz)	7
Polarization	vertical
Continuous Max Power (W)	100

Mechanical Specifications

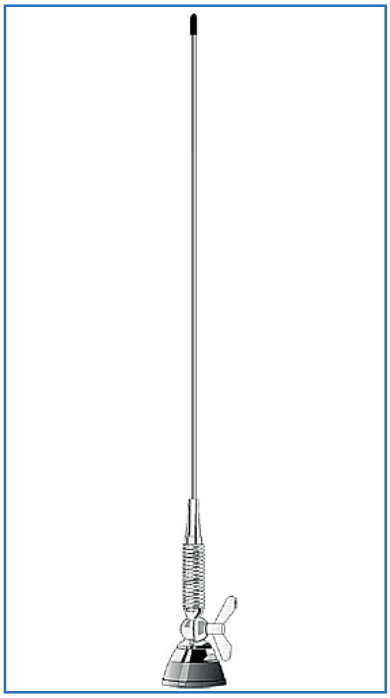
Type of connection (RG058 coaxial connection)	4.5 mt
Length of the whip (mm)	535
Whip material	Inox steel
Spring material	Inox steel
Mounting hole (mm)	Ø 19
Base	Waterfproof "L" mount

DESCRIPTION:

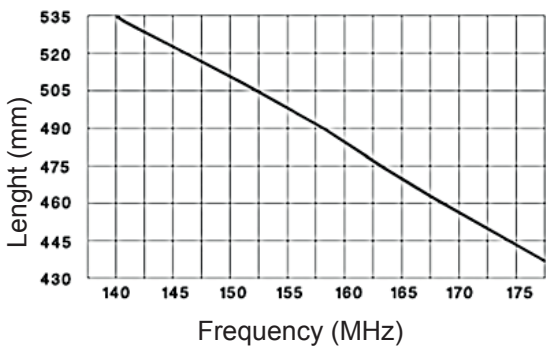
Mobile whip antenna with relative base.

Conical inox steel whip with inox steel spring at base.

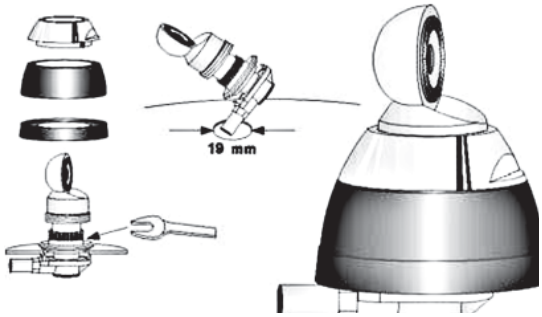
Tunable by whip cutting (see cutting diagram).



Cutting Diagram



Mounting Instructions



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VEHICULAR CUTTABLE WHIP VHF ANTENNA

144 ÷ 174 MHz

R-V 111 XH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band (MHz)	144 ÷ 174
Impedance (Ω)	50
VSWR at resonant frequency	≤ 1.5
Gain (dBd)	0
Bandwidth at resonant frequency (MHz)	6
Polarization	vertical
Continuous Max Power (W)	100

Mechanical Specifications

Type of connection (M17/028-RG058 coaxial connection)	4.5 mt
Length of the whip (mm)	520
Whip material	17/7 PH passivated - cylindircal
Mounting hole (mm)	Ø 24
Net weight (g)	350
Working Temperature (°C)	-35 ÷ +80

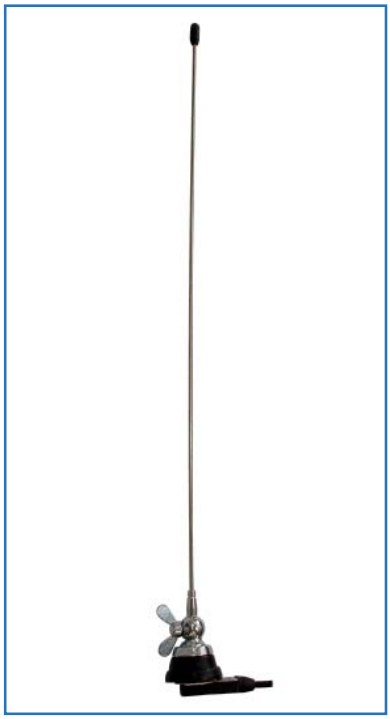
DESCRIPTION:

Mobile whip antenna with relative base for VHF vehicular applications.

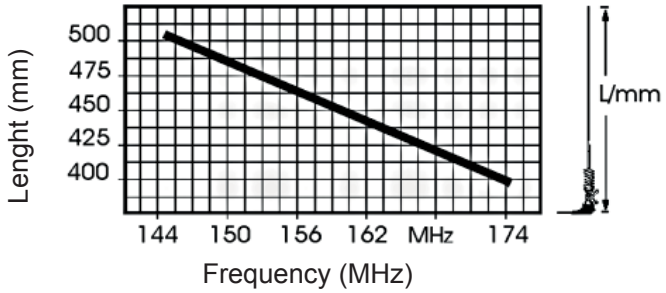
Conical 17/7 PH passivated whip.

Tunable by whip cutting (see cutting diagram).

- BASE CODE : R-K 85.01
- STEEL CODE: R-K 80.03



Cutting Diagram



By RAC

MOBILE CUTTABLE WHIP VHF ANTENNA

400 ÷ 470 MHz

R-V 311 XQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications	
Type	1/4 λ
Frequency Band (MHz)	400 ÷ 470
Impedance (Ω)	50
VSWR at resonant frequency	≤ 2
Gain (dBd)	2
Bandwidth at resonant frequency (MHz)	12
Polarization	vertical
Continuous Max Power (W)	100

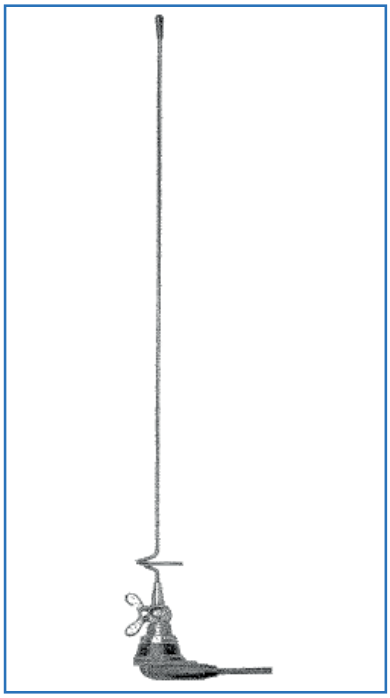
Mechanical Specifications	
Type of connection (M17/028-RG058 coaxial connection)	4.5 mt
Length of the whip (mm)	480
Whip material	Inox steel cylindircal
Spring material	Inox steel
Mounting hole (mm)	Ø 24
Net weight (g)	380
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

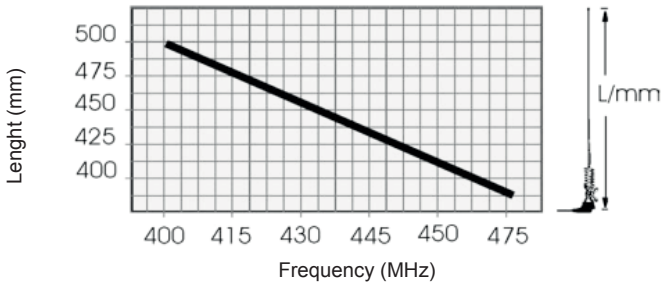
Mobile whip antenna with relative base for UHF vehicular applications.

Inox steel whip and inox steel spring.

Tunable by whip cutting (see cutting diagram).



Cutting Diagram



By RAC

VEHICULAR CUTTABLE WHIP UHF ANTENNA

435 ÷ 470 MHz

R-V 511 XZ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band (MHz)	435 ÷ 470
Impedance (Ω)	50
VSWR at resonant frequency	≤ 2
Gain (dBd)	4
Bandwidth at resonant frequency (MHz)	12
Polarization	vertical
Continuous Max Power (W)	100

Mechanical Specifications

Type of connection (M17/028-RG058 coaxial connection)	4.5 mt
Length of the whip (mm)	600
Whip material	Inox steel cylindircal
Spring material	Inox steel
Mounting hole (mm)	Ø 24
Net weight (g)	440
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

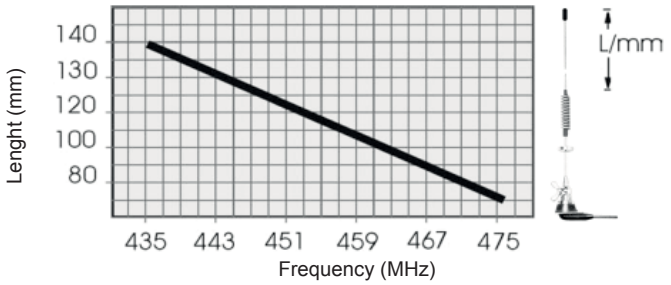
Mobile whip antenna with relative base for UHF vehicular applications.

Inox steel whip and inox steel spring.

Tunable by whip cutting (see cutting diagram).

- BASE CODE: R-K 85.01
- STEEL CODE: R-K 80.04

Cutting Diagram



By RAC

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VEHICULAR TUNABLE VHF WHIP

164 ÷ 174 MHz

GT FLEX V

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band VHF (MHz)	164 ÷ 174 MHz
Impedance (Ω)	50
VSWR at resonant frequency	< 1.6 :1
Polarization	vertical
Gain (dBd) over 1/4 λ monopole	0
Max RF Power (W)	30

Mechanical Specifications

Type of connections (RG 174 cable)	Pigtail 30 cm. of RG 174 + extension cable on request
Extension cable	RG58 5-7-10m
Length of the whip (mm)	abt. 470 mm max
whip material	stainless steel
Mounting hole (mm)	see perforation mask
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	abt. 0.3

DESCRIPTION:

Vehicular VHF whip antenna.

Stainless steel whip tunable by cutting (see cutting diagram).

Cutting Diagram 164 ÷ 174 MHz

By λεα LEANTENNE

VEHICULAR TUNABLE VHF WHIP AND GPS BAND

140 ÷ 175 MHz and 1575.42 ± 3 MHz

GT FLEX VG

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band VHF (MHz)	140 ÷ 175
Impedance (Ω)	50
VSWR at resonant frequency	≤ 2
Polarization	vertical
Gain (dBd) over 1/4 λ monopole	0
Max RF Power (W)	30

GPS Specifications

Type	Patch
Frequency Band GPS (MHz)	1575.42 ± 3
VSWR at resonant frequency	≤ 2
Polarization	RHCP
Gain (dBi)	1 min (70x70 ground plane)
Continuous Max Power (W)	30
LNA GPS	
Gain (dB)	29 typ. (5 Vdc power supply)
Noise Figure (dB)	2 max. (5 Vdc power supply)
Attenuation (dB)	28 min. (@1575.42±100 MHz)
VSWR	≤ 2
Consumption current (mA)	30 max
Output impedance (Ω)	5
Operating voltage (Vdc)	3 ÷ 5

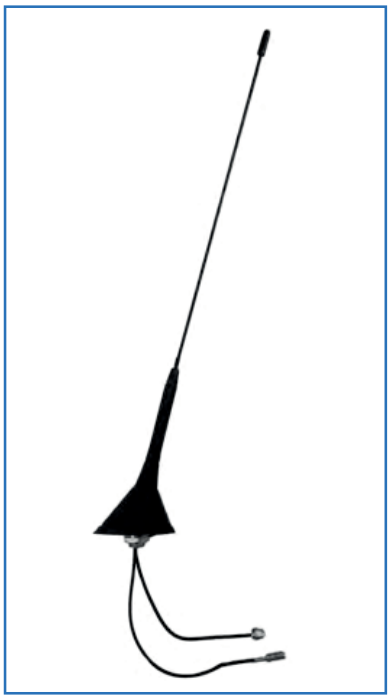
Mechanical Specifications

Type of connections (RG 174 cable)	SMA Female for VHF SMA Male for GPS Length at request
Length of the whip (mm)	470
whip material	stainless steel
Mounting hole (mm)	Ø 19 or 15
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	abt. 0.3

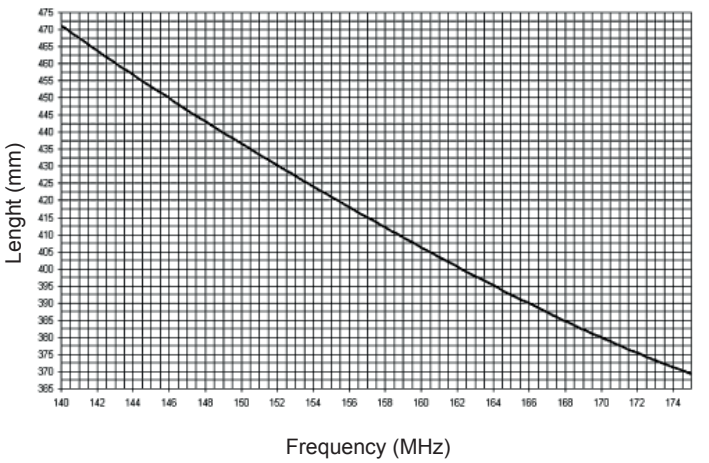
DESCRIPTION:

Vehicular VHF whip antenna and GPS bands with base.

Stainless steel whip tunable by cutting (see cutting diagram).



Cutting Diagram



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VEHICULAR TUNABLE VHF WHIP

380 ÷ 400 MHz or 450 ÷ 470 MHz

GT FLEX U

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type	1/4 λ
Frequency Band VHF (MHz)	380 ÷ 400 / 450 ÷ 470 MHz
Impedance (Ω)	50
VSWR at resonant frequency	< 2:1
Polarization	vertical
Gain (dBd) over 1/4 λ monopole	0
Max RF Power (W)	30

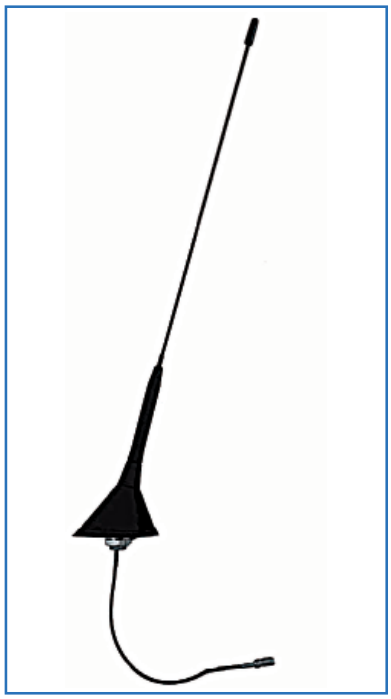
Mechanical Specifications

Type of connections (RG 174 cable)	Pigtail 30 cm. of RG 174 + extension cable on request
Length of the whip (mm)	abt. 380
whip material	antihissing whip
Mounting hole (mm)	see perforation mask
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	abt. 0.3

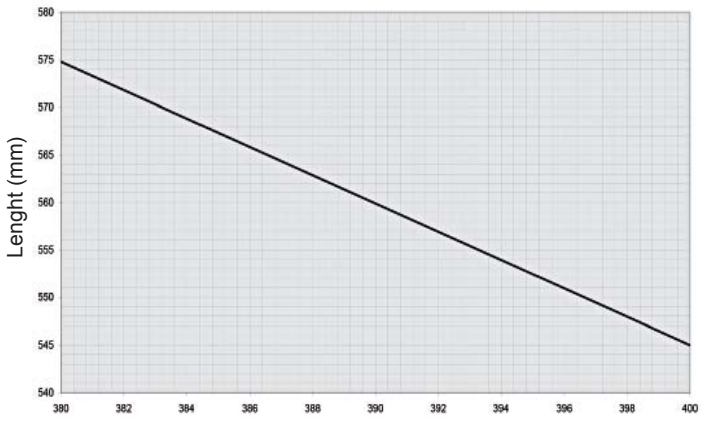
DESCRIPTION:

Vehicular VHF whip antenna.

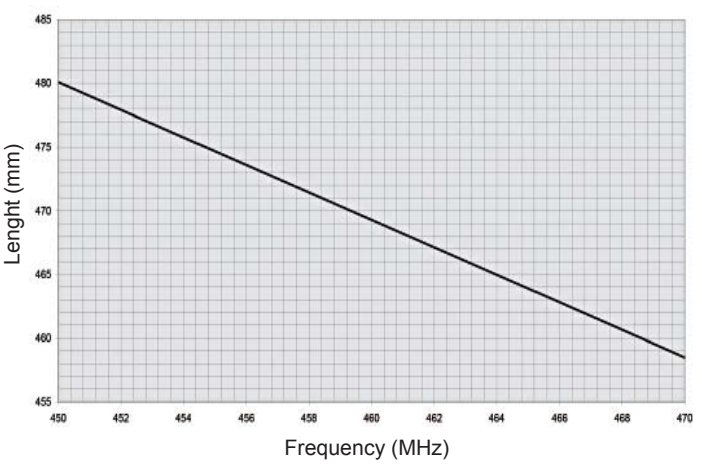
Antihissing whip tunable by cutting (see cutting diagram).



Cutting Diagram 380 ÷ 400 MHz



Cutting Diagram 450 ÷ 470 MHz



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VEHICULAR TUNABLE UHF WHIP AND GPS BAND

370 ÷ 480 MHz and 1575.42 ± 3 MHz

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

GT FLEX UG

PMR

Electrical Specifications

Type	1/4 λ
Frequency Band VHF (MHz)	370 ÷ 480
Impedance (Ω)	50
VSWR at resonant frequency	≤ 2
Polarization	vertical
Gain (dBd) over 1/4 λ monopole	0
Max RF Power (W)	30

GPS Specifications

Type	Patch
Frequency Band GPS (MHz)	1575.42 ± 3
VSWR at resonant frequency	≤ 2
Polarization	RHCP
Gain (dBi)	1 min (70x70 ground plane)
Continuous Max Power (W)	30
LNA GPS	
Gain (dB)	29 typ. (5 Vdc power supply)
Noise Figure (dB)	2 max. (5 Vdc power supply)
Attenuation (dB)	28 min. (@1575.42±100 MHz)
VSWR	≤ 2
Consumption current (mA)	30 max
Output impedance (Ω)	5
Operating voltage (Vdc)	3 ÷ 5

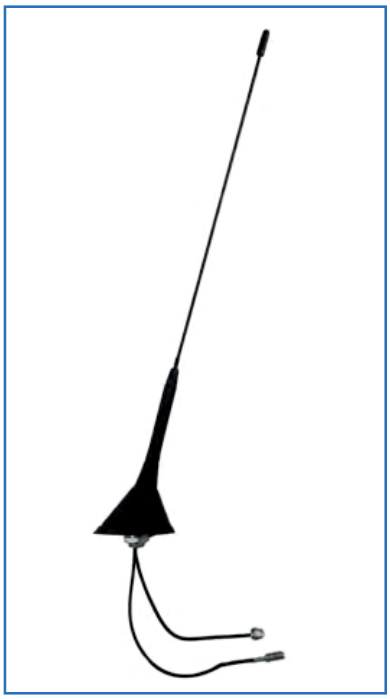
Mechanical Specifications

Type of connections (RG 174 cable)	SMA Female for VHF SMA Male for GPS Length at request
Length of the whip (mm)	560
whip material	stainless steel
Mounting hole (mm)	Ø 19 or 15
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	abt. 0.3

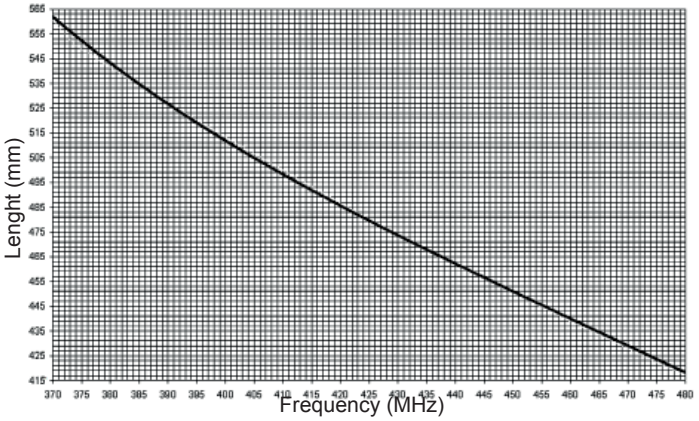
DESCRIPTION:

Vehicular UHF whip antenna and GPS bands with base.

Stainless steel whip tunable by cutting (see cutting diagram).



Cutting Diagram



By λεα LEANTENNE

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HALF WAVE DIPOLE VHF ANTENNA

73 ÷ 84 MHz

SF 020

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

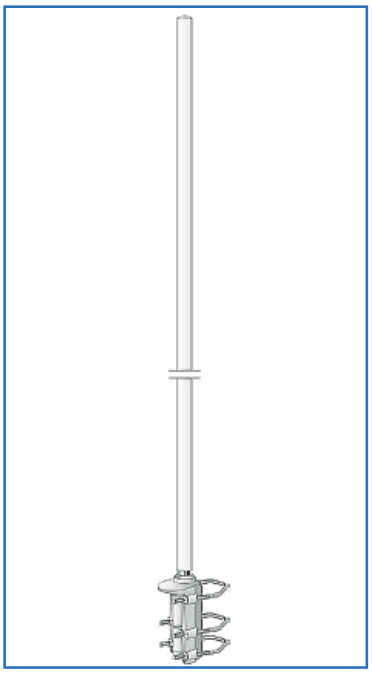
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		73 ÷ 84
Impedance (Ω)		50
VSWR		<1.7
Polarization		vertical
HPBW (deg)	Vertical plane	69
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

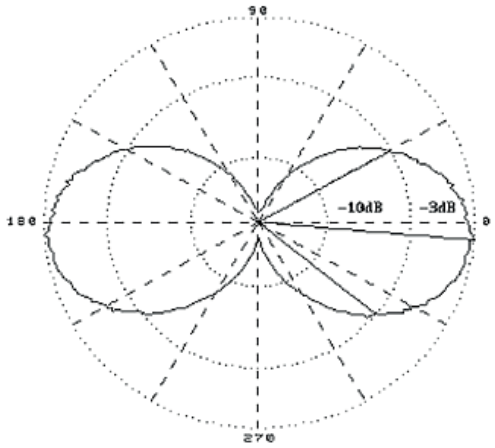


Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Wind resistance (km/h)	120
Temperature range (°C)	-40 ÷ +75
Length (mm)	2500
Weight (kg)	4.0

Radiation Patterns

Vertical plane



By λεα LEANTENNE

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HALF WAVE DIPOLE VHF ANTENNA

70 ÷ 75 MHz

R-F 131 NE

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Product		R-F 131 NE
Type		Half Wave Vertical Dipole
Frequency Band (MHz)		70 ÷ 75
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	78
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

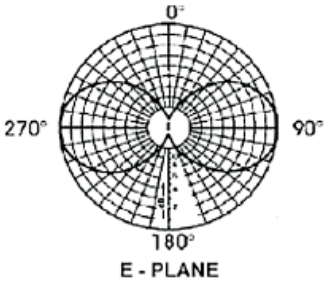
Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

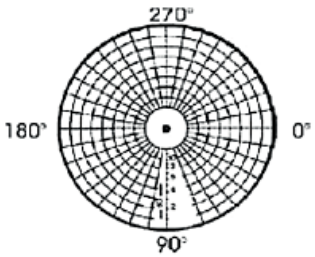
Mechanical Specifications

Product	R-F 131 NE
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.6

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

75 ÷ 80 MHz

R-F 130 NE

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

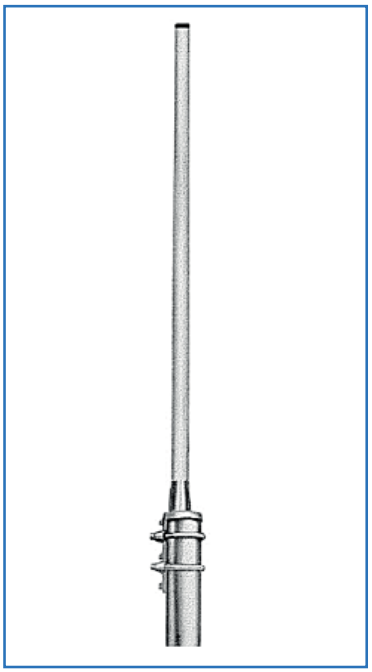
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		75 ÷ 80
Impedance (Ω)		50
VSWR		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	78
	Horizon-tal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

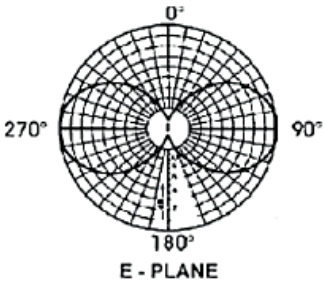
All parts of the antenna are DC grounded from lightning protection.



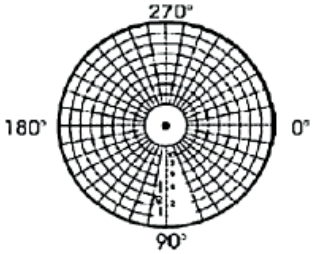
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.6

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

118 ÷ 148 MHz

SF 120 L

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

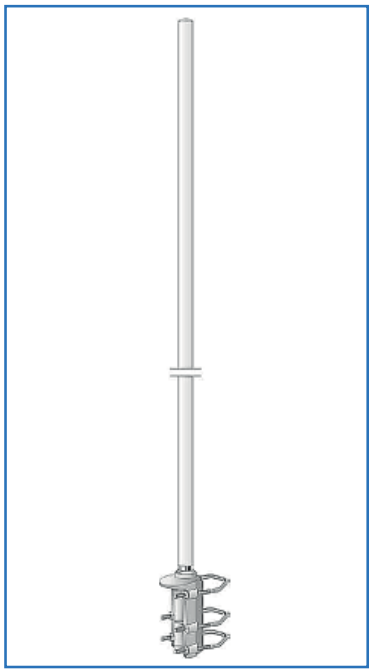
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		118 ÷ 148
Impedance (Ω)		50
VSWR		<1.7
Polarization		vertical
HPBW (deg)	Vertical plane	69
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

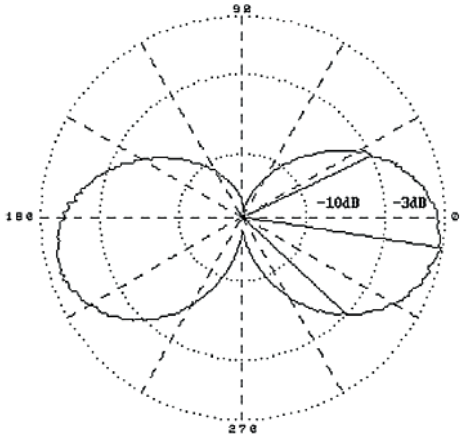


Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Wind resistance (km/h)	120
Temperature range (°C)	-40 ÷ +75
Length (mm)	1300
Weight (kg)	2.0

Radiation Patterns

Vertical plane



By λεα LEANTENNE

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HALF WAVE DIPOLE VHF ANTENNA

142 ÷ 160 MHz

R-F 331 NG

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

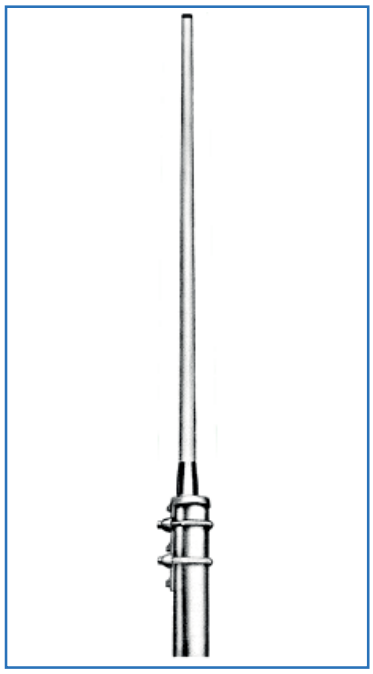
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		142 ÷ 160
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	21
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		100

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

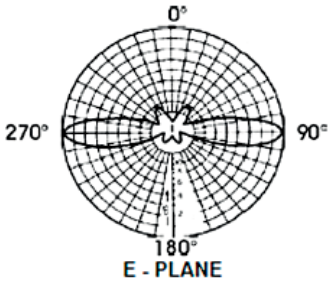
All parts of the antenna are DC grounded from lightning protection.



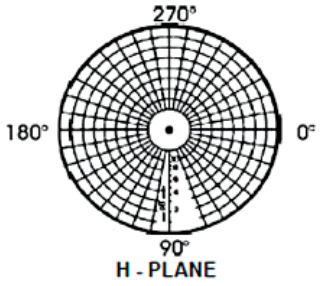
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.4

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

145 ÷ 175 MHz

SF 120 H

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

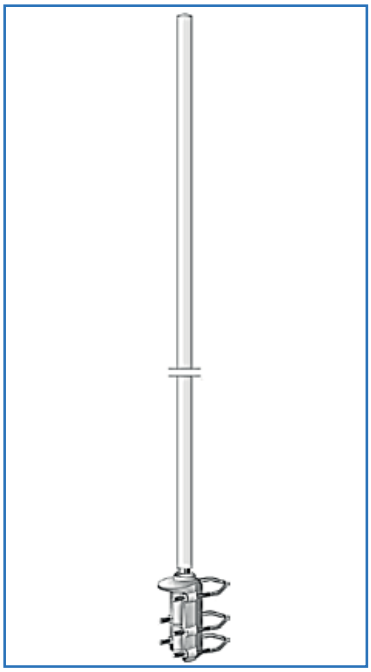
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		145 ÷ 175
Impedance (Ω)		50
VSWR at resonant frequency		<1.7
Polarization		vertical
HPBW (deg)	Vertical plane	69
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

Half wave vertical dipole antena for VHF band.

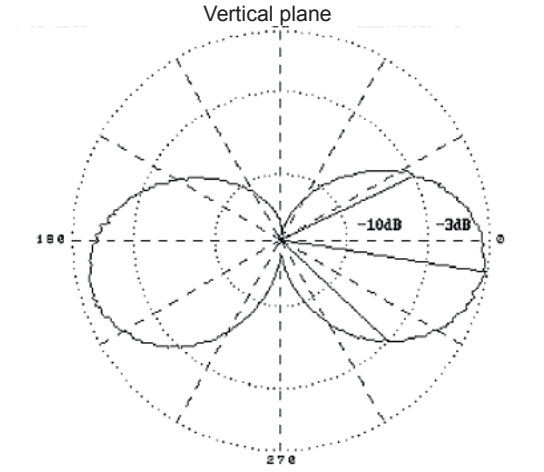
All parts of the antenna are DC grounded from lightning protection.



Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Wind resistance (km/h)	120
Temperature range (°C)	-40 ÷ +75
Length (mm)	1300
Weight (kg)	2.0

Radiation Patterns



By λεα LEANTENNE

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HALF WAVE DIPOLE VHF ANTENNA

147 ÷ 156 MHz

R-F 130 NG

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		147 ÷ 156
Impedance (Ω)		50
VSWR		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	78
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

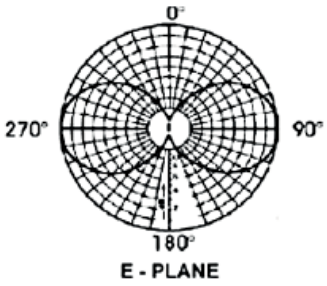
Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

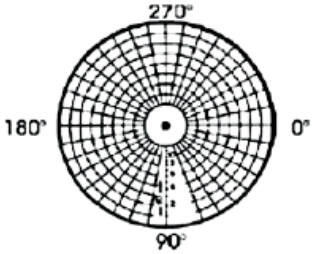
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1410
Weight (kg)	1.2

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

156 ÷ 165 MHz

R-F 132 NH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		156 ÷ 165
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	78
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

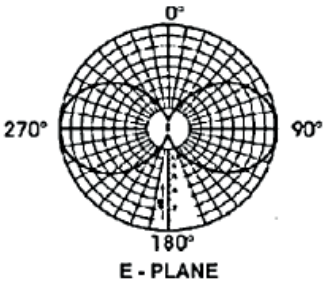
Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

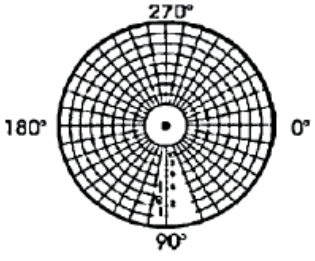
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1270
Weight (kg)	1.2

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

165 ÷ 174 MHz

R-F 133 NH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		165 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	78
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

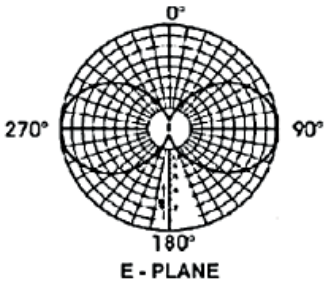
Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

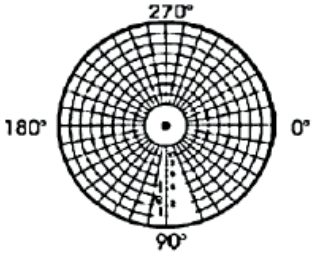
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1270
Weight (kg)	1.2

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

147 ÷ 173 MHz

R-F 333 NH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		147 ÷ 173
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	21
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		100

DESCRIPTION:

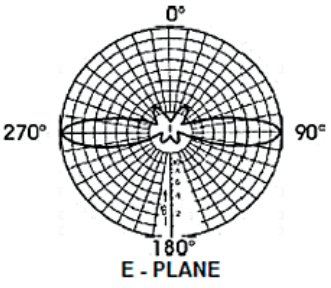
Half wave vertical dipole antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

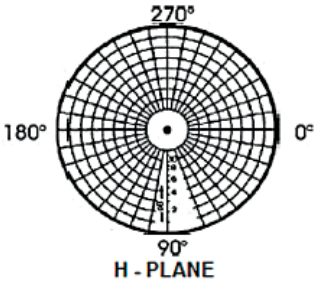
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.4

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE VHF ANTENNA

154 ÷ 170 MHz

R-F 332 NH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

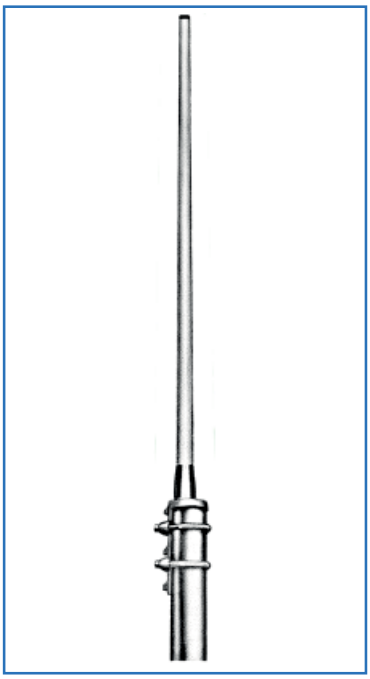
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		154 ÷ 170
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	21
	Horizontal plane	Omni
Gain (dBd)		4
Continuous Max Power (W)		100

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

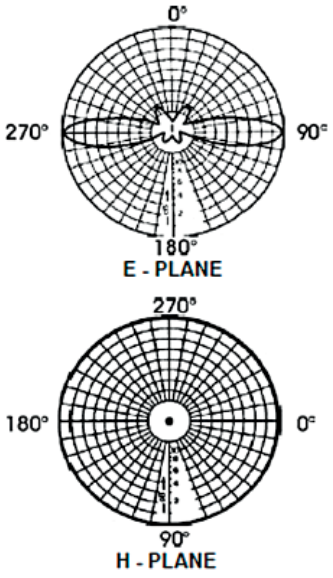
All parts of the antenna are DC grounded from lightning protection.



Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.4

Radiation Patterns



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HALF WAVE DIPOLE VHF ANTENNA

158 ÷ 174 MHz

R-F 331 NH

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

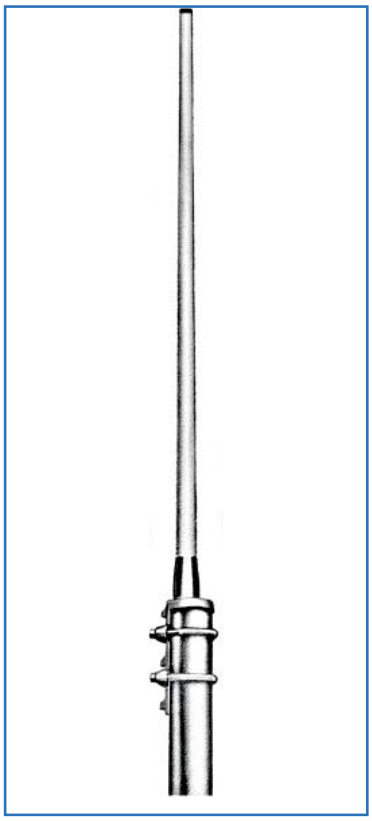
Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		158 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	21
	Horizontal plane	Omni
Gain (dBd)		4
Continuous Max Power (W)		100

DESCRIPTION:

Half wave vertical dipole antenna for VHF band.

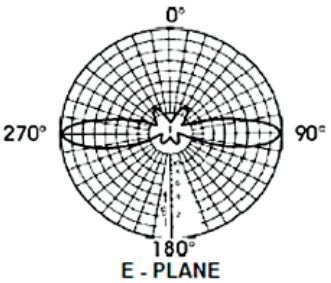
All parts of the antenna are DC grounded from lightning protection.



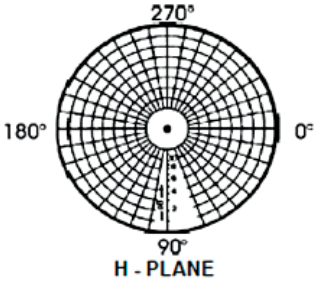
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2450
Weight (kg)	2.4

Radiation Patterns



E - PLANE



H - PLANE

By RAC

COLINEAR UHF ANTENNA

380 ÷ 430 MHz

SF 333

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

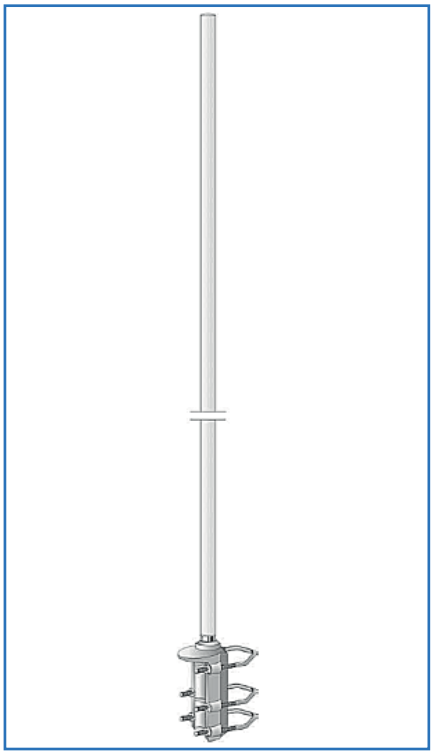
Electrical Specifications

Type		3 elements colinear
Frequency Band (MHz)		380 ÷ 430
Impedance (Ω)		50
VSWR at resonant frequency		<1.8
Polarization		vertical
HPBW (deg)	Vertical plane	28
	Horizontal plane	Omni
Gain (dBd)		3.5
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

3 elements colinear antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection and with condesing hole.

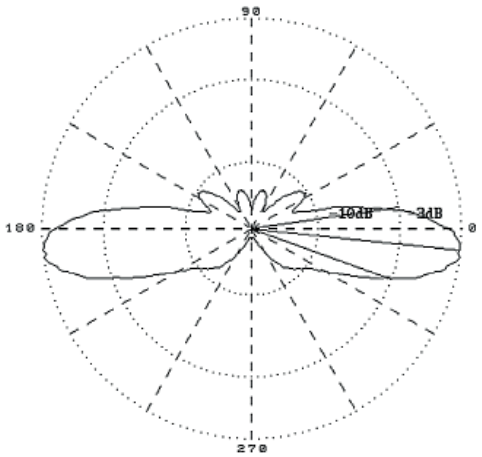


Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Length (mm)	1700
Weight (kg)	2.1
Temperature range (°C)	-40 ÷ +55
Wind resistance (km/h)	180

Radiation Patterns

Vertical Plane



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COLINEAR UHF ANTENNA

380 ÷ 400 MHz

R-F 530 NL

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		colinear
Frequency Band (MHz)		380 ÷ 400
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	18
	Horizontal plane	Omni
Gain (dBd)		5
Continuous Max Power (W)		100

DESCRIPTION:

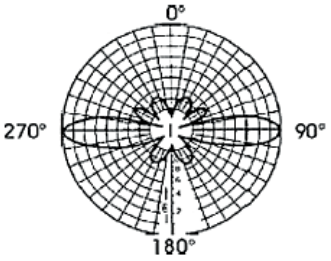
Colinear antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

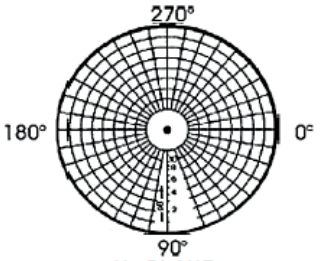
Mechanical Specifications

Product	R-F 330 NQ
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2360
Weight (kg)	2.2

Radiation Patterns



E - PLANE



H - PLANE

By RAC

COLINEAR UHF ANTENNA

380 ÷ 430 MHz

SF 335

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

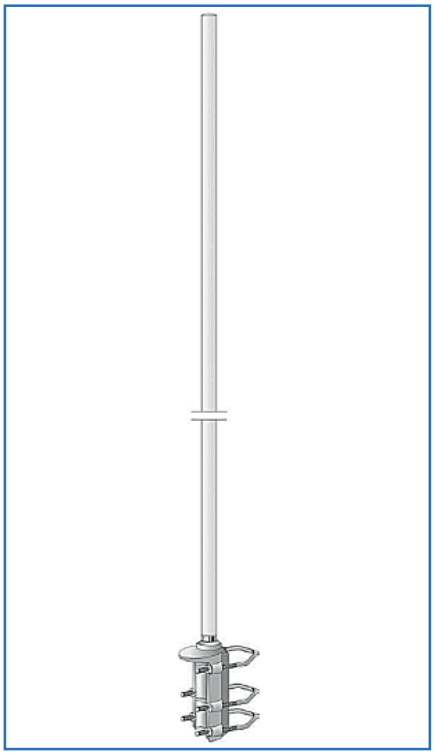
Electrical Specifications

Type		4 elements colinear
Frequency Band (MHz)		380 ÷ 430
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	22
	Horizontal plane	Omni
Gain (dBd)		5
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

4 elements colinear antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection and with condesing hole.

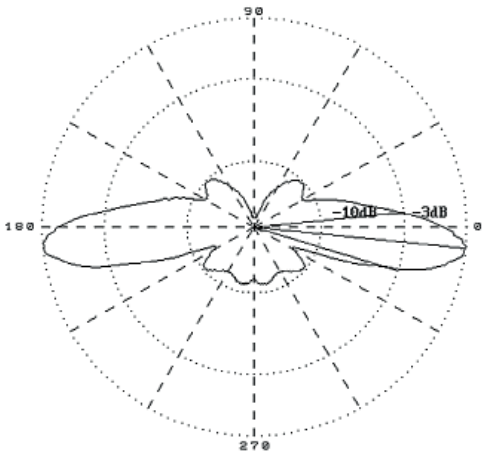


Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Length (mm)	2450
Weight (kg)	2.5
Temperature range (°C)	-40 ÷ +80
Wind resistance (km/h)	180

Radiation Patterns

Vertical Plane



By λεα LEANTENNE

HALF WAVE DIPOLE UHF ANTENNA

400 ÷ 435 MHz

R-F 330 NQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		400 ÷ 435
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	30
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		100

DESCRIPTION:

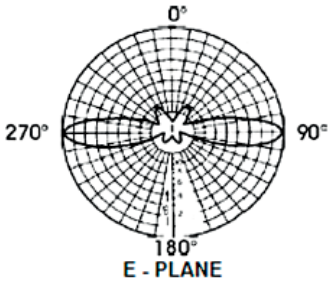
Half wave vertical dipole antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

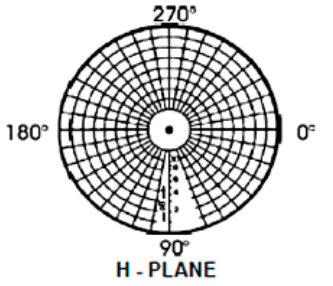
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1410
Weight (kg)	1.3

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE UHF ANTENNA

400 ÷ 470 MHz

SF 420

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Half Wave Vertical Dipole
Frequency Band (MHz)		400 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		200 (400 peak)

DESCRIPTION:

Half wave vertical dipole antenna for UHF band.

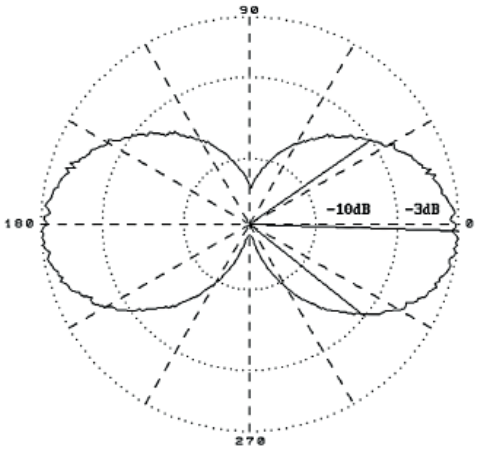
All parts of the antenna are DC grounded from lightning protection.

Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	30 ÷ 62
Radome material	Fiberglass
Length (mm)	635
Weight (kg)	1.5
Temperature range (°C)	-40 ÷ +75
Wind resistance (km/h)	160

Radiation Patterns

Vertical Plane



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HALF WAVE DIPOLE UHF ANTENNA

400 ÷ 435 MHz

R-F 530 NQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Product		R-F 530 NQ
Type		Half Wave Vertical Dipole
Frequency Band (MHz)		400 ÷ 435
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	18
	Horizontal plane	Omni
Gain (dBd)		5
Continuous Max Power (W)		100

DESCRIPTION:

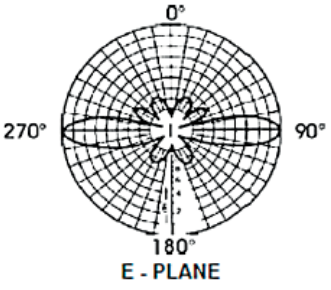
Half wave vertical dipole antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

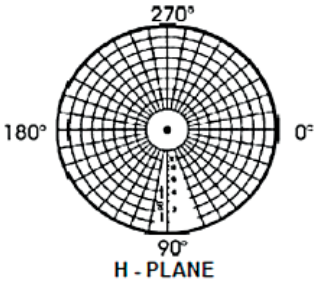
Mechanical Specifications

Product	R-F 530 NQ
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	2210
Weight (kg)	1.9

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE UHF ANTENNA

435 ÷ 470 MHz

R-F 130 NZ

PMR

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Our products can be tailored according to the customer's need.

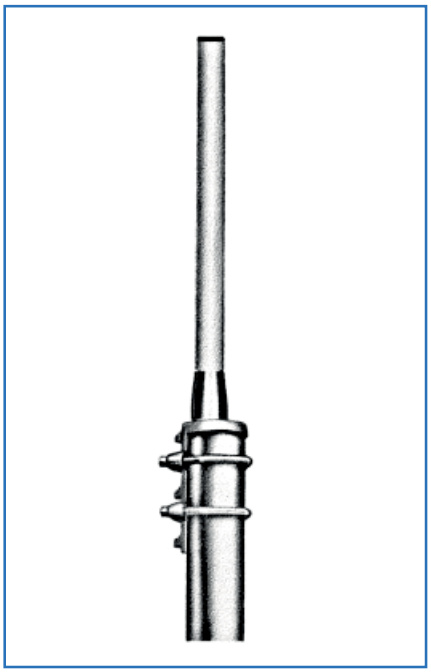
Electrical Specifications

Product		R-F 130 NZ
Type		Half Wave Vertical Dipole
Frequency Band (MHz)		435 ÷ 470
Impedance (Ω)		50
VSWR		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	78
	Horizontal plane	Omni
Gain (dBd)		0
Continuous Max Power (W)		100

DESCRIPTION:

Half wave vertical dipole antenna for UHF band.

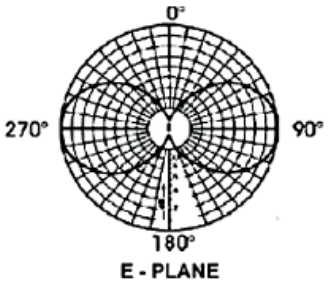
All parts of the antenna are DC grounded from lightning protection.



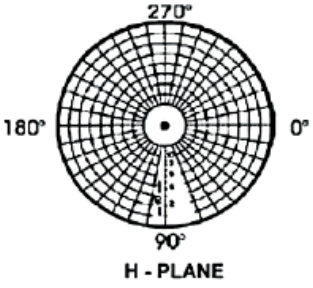
Mechanical Specifications

Product	R-F 130 NZ
Type of connection	N female
Mounting hole (mm)	30 ÷ 60
Elements material	Brass passivated
Radome coverage	Fiberglass
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	700
Weight (kg)	1.0

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE DIPOLE UHF ANTENNA

435 ÷ 470 MHz

R-F 330 NZ

PMR

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Electrical Specifications

Product		R-F 330 NZ
Type		Half Wave Vertical Dipole
Frequency Band (MHz)		435 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	30
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		100

DESCRIPTION:

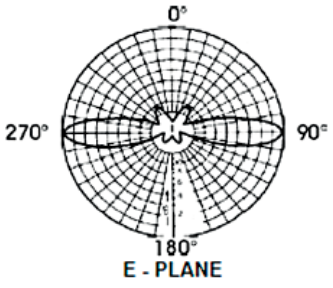
Half wave vertical dipole antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

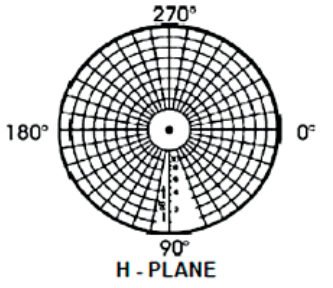
Mechanical Specifications

Product	R-F 330 NQ
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1270
Weight (kg)	1.2

Radiation Patterns



E - PLANE



H - PLANE

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HALF WAVE DIPOLE UHF ANTENNA

435 ÷ 470 MHz

R-F 530 NZ

PMR

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Electrical Specifications

Product		R-F 530 NZ
Type		Half Wave Vertical Dipole
Frequency Band (MHz)		435 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	18
	Horizontal plane	Omni
Gain (dBd)		5
Continuous Max Power (W)		100

DESCRIPTION:

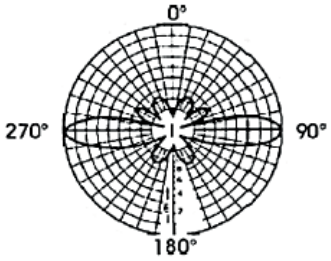
Half wave vertical dipole antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

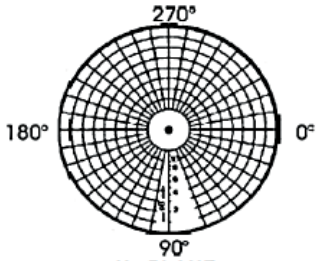
Mechanical Specifications

Product	R-F 530 NQ
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Radiator Coverage	Fiberglass
Elements material	Brass passivated
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Length (mm)	1980
Weight (kg)	1.8

Radiation Patterns



E - PLANE



H - PLANE

By RAC

FOUR STACKED FOLDED DIPOLES UHF ANTENNA

400 ÷ 470 MHz

R-F 610 NQ

PMR

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Electrical Specifications

Product		R-F 610 NQ
Type		4 dipoles in colinear configuration
Frequency Band (MHz)		400 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical
HPBW (deg)	Vertical plane	14
	Horizontal plane	Omni
Gain (dBd)		8
Continuous Max Power (W)		600

DESCRIPTION:

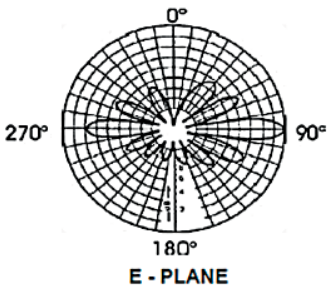
Four folded dipoles set-up in colinear configuration antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

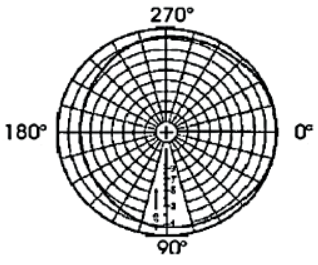
Mechanical Specifications

Product	R-F 610 NQ
Type of connection	N female
Mounting hole (mm)	30 ÷ 60
Elements material	Aluminium alloy DIN 3.2315
Boom material	Aluminium alloy DIN 3.2306
Length (mm)	2410
Weight (kg)	7.5
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80

Radiation Patterns



E - PLANE



H - PLANE

By RAC

HALF WAVE CENTER FED DIPOLE VHF ANTENNA

66 ÷ 80 MHz

R-Y 010 NE

PMR

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Electrical Specifications

Type		Half Wave Center Fed Dipole
Frequency Band (MHz)		66 ÷ 80
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	Omni
Gain (dBd)		1
Continuous Max Power (W)		150

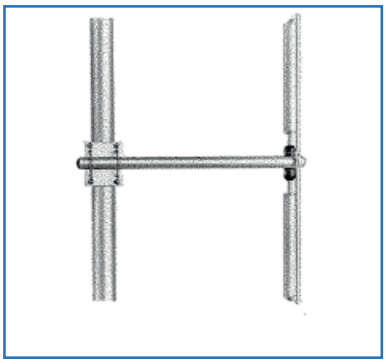
Mechanical Specifications

Type of connection	N female
Mounting hole (mm) on master tube	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1515 x 820
Weight (kg)	3.6

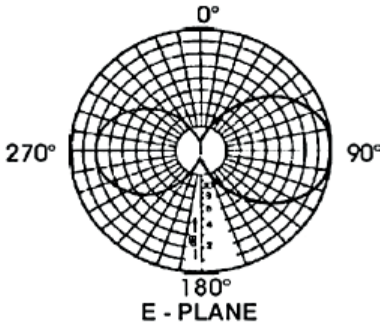
DESCRIPTION:

Half wave center fed dipole antenna for VHF band.

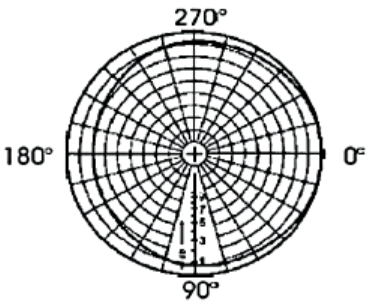
All parts of the antenna are DC grounded from lightning protection.



Radiation Patterns



E - PLANE



H - PLANE

DIRECTIONAL ANTENNAS

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YAGI 2 ELEMENTS VHF ANTENNA

68 ÷ 80 MHz

R-Y 210 NE

PMR

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DIRECTIONAL ANTENNAS

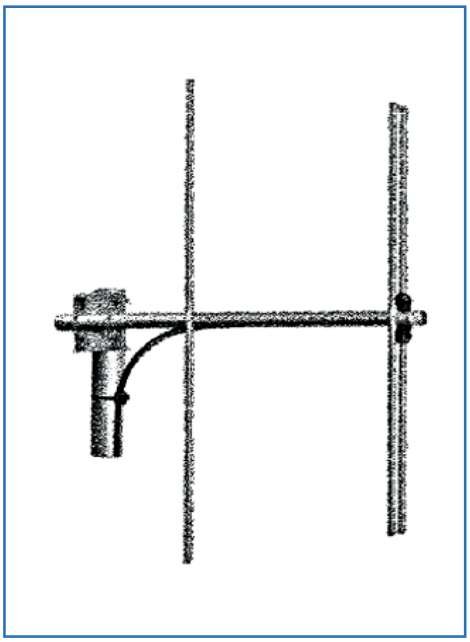
Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		68 ÷ 80
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	72
	Horizontal plane	150
Gain (dBd)		3
Front to back Ratio (dBd)		>9
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 2 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

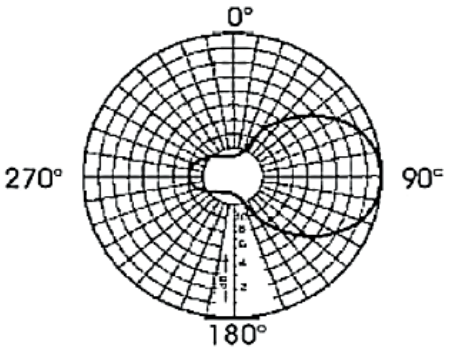


Mechanical Specifications

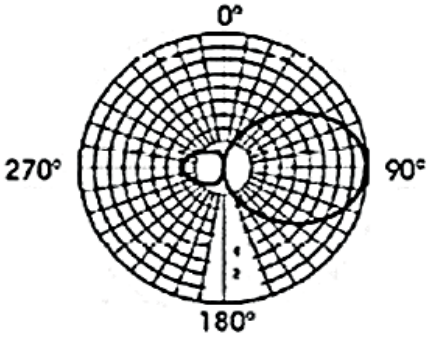
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1515 x 2230
Weight (kg)	3.8

Radiation Patterns

Vertical Plane



Horizontal Plane



By RAC

YAGI 4 ELEMENTS VHF ANTENNA

73.5 ÷ 76.5 MHz

SY 054

PMR

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Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Yagi 4 elements
Frequency Band (MHz)		73.5 ÷ 76.5
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	64
	Horizontal plane	113
Gain (dBd)		5
Front to back Ratio (dBd)		>14
Continuous Max Power (W)		200

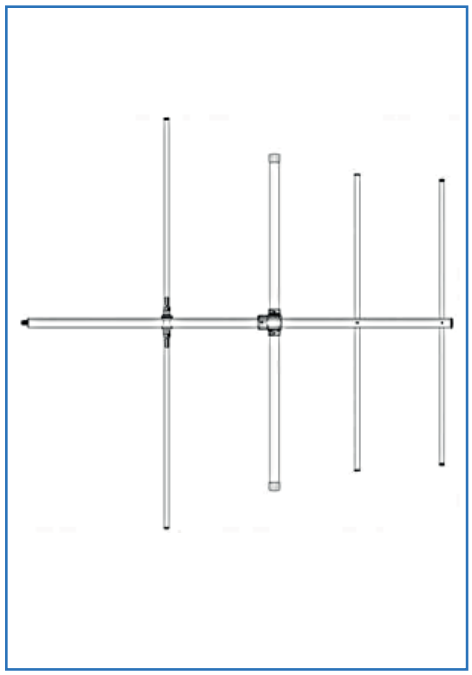
Mechanical Specifications

Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	2405 x 2100
Weight (kg)	7.0

DESCRIPTION:

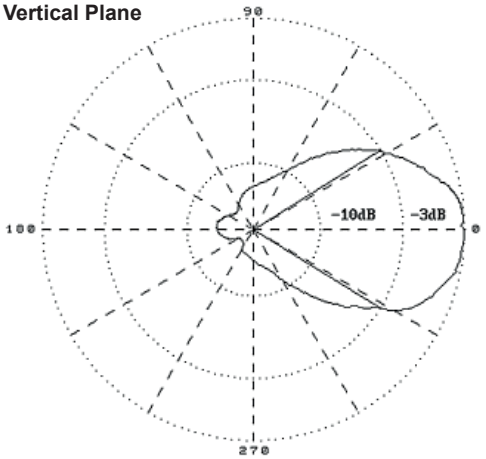
Yagi 4 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

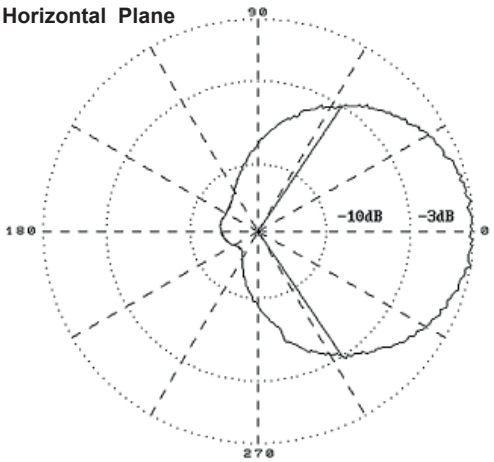


Radiation Patterns

Vertical Plane



Horizontal Plane



DIRECTIONAL ANTENNAS

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YAGI 2 ELEMENTS VHF ANTENNA

80 ÷ 87 MHz

SY 052

PMR

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DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		80 ÷ 87
Impedance (Ω)		50
VSWR at resonant frequency		≤ 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	75
	Horizontal plane	202
Gain (dBd)		3
Front to back Ratio (dBd)		>10
Continuous Max Power (W)		200

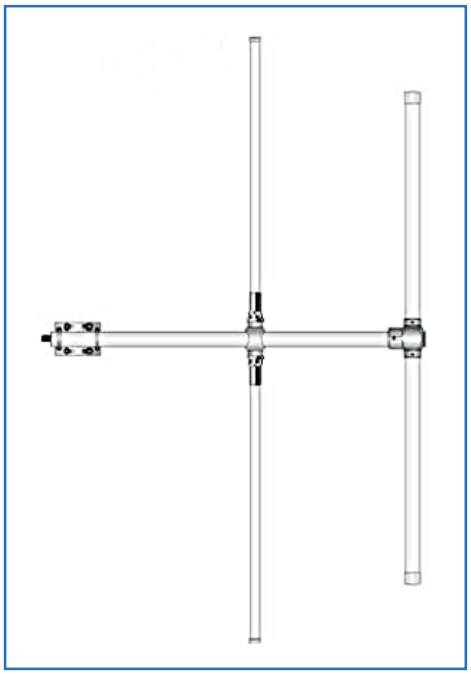
Mechanical Specifications

Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1950 x 1090
Weight (kg)	4.5

DESCRIPTION:

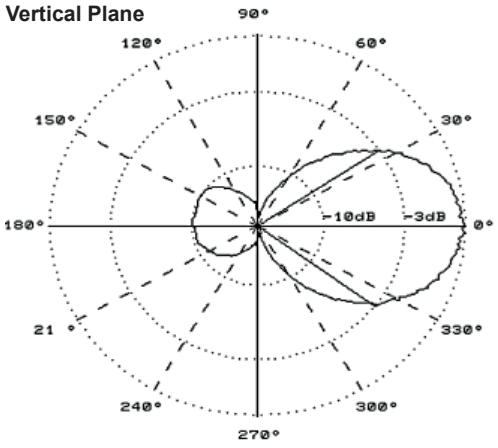
Yagi 2 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

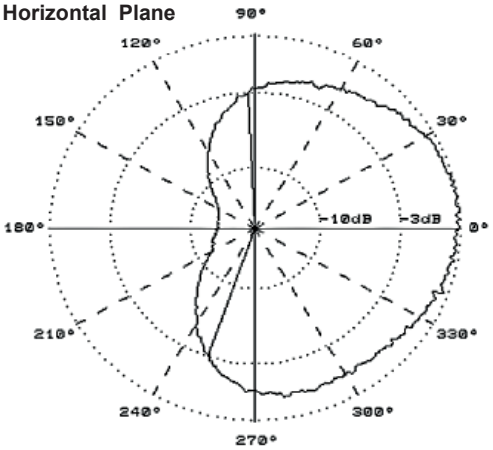


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 3 ELEMENTS VHF ANTENNA

110 ÷ 120 MHz

SY 153 A

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 3 elements
Frequency Band (MHz)		110 ÷ 120
Impedance (Ω)		50
VSWR at resonant frequency		≤ 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	70
	Horizontal plane	142
Gain (dBd)		5.5
Front to back Ratio (dBd)		>17
Continuous Max Power (W)		200

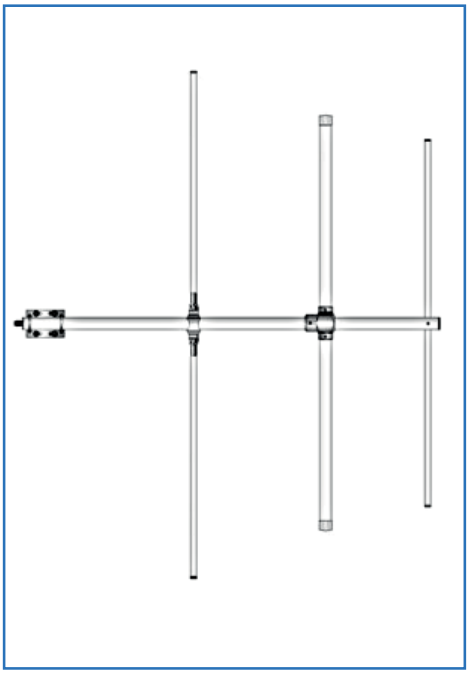
Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1430 x 1430
Weight (kg)	4.0

DESCRIPTION:

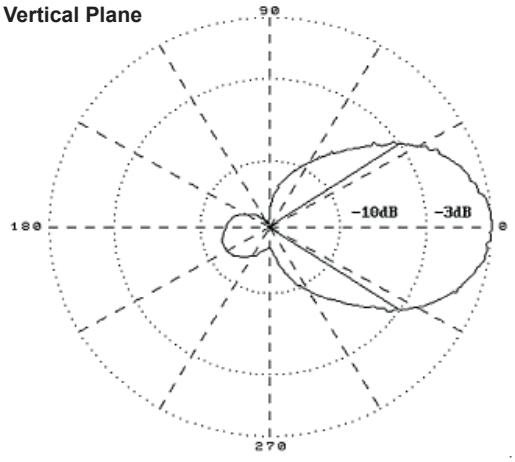
Yagi 3 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

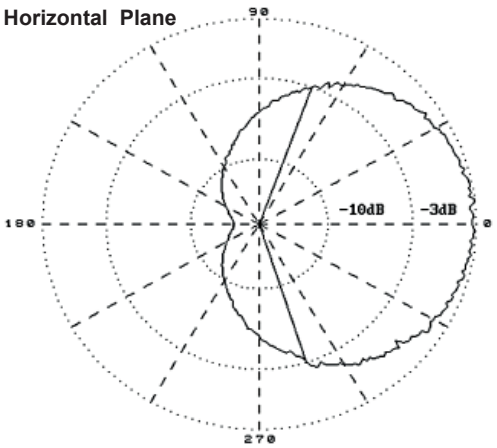


Radiation Patterns

Vertical Plane



Horizontal Plane



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HALF WAVE CENTER FED DIPOLE VHF ANTENNA

140 ÷ 174 MHz

R-Y 010 NG

PMR

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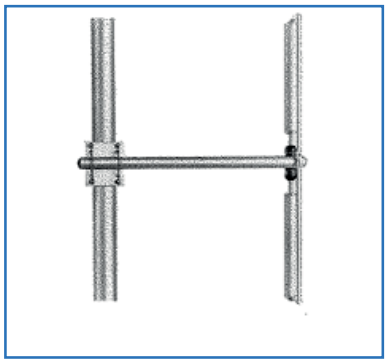
Electrical Specifications

Product		R-Y 010 NG
Type		Half Wave Center Fed Dipole
Frequency Band (MHz)		140 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	Omni
Gain (dBd)		1
Continuous Max Power (W)		150

DESCRIPTION:

Half wave center fed dipole antenna for VHF band.

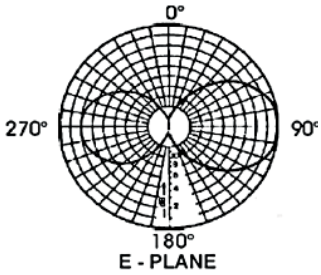
All parts of the antenna are DC grounded from lightning protection.



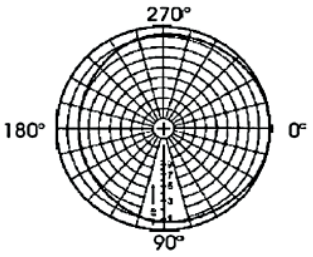
Mechanical Specifications

Product	R-Y 010 NG
Type of connection	N female
Mounting hole (mm) on master tube	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	615 x 820
Weight (kg)	2.4

Radiation Patterns



E - PLANE



H - PLANE

By RAC

YAGI 4 ELEMENTS VHF ANTENNA

140 ÷ 158 MHz

SY 154 L

PMR

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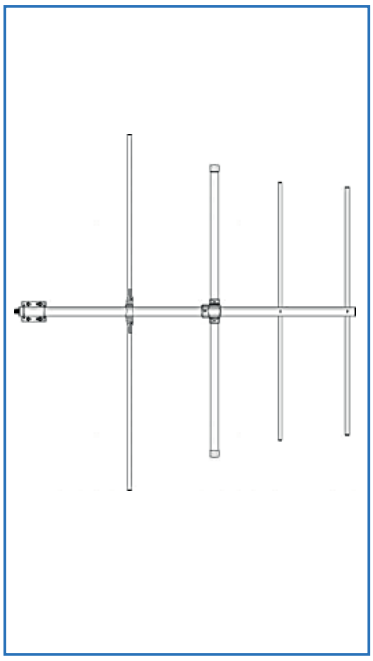
Electrical Specifications

Type		Yagi 4 elements
Frequency Band (MHz)		140 ÷ 158
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	81
	Horizontal plane	56
Gain (dBd)		7
Front to back Ratio (dBd)		>14
Continuous Max Power (W)		200

DESCRIPTION:

Yagi 4 elements antennas for VHF band.

All parts of the antenna are DC grounded from lightning protection.

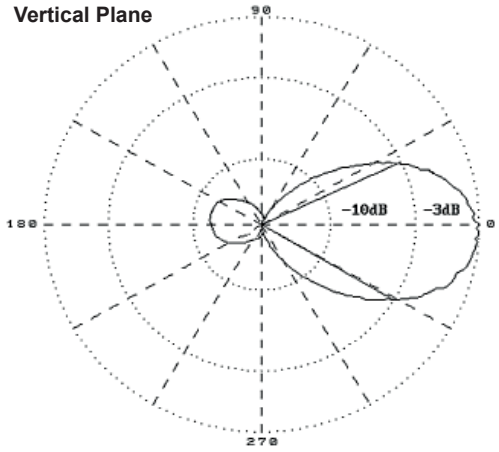


Mechanical Specifications

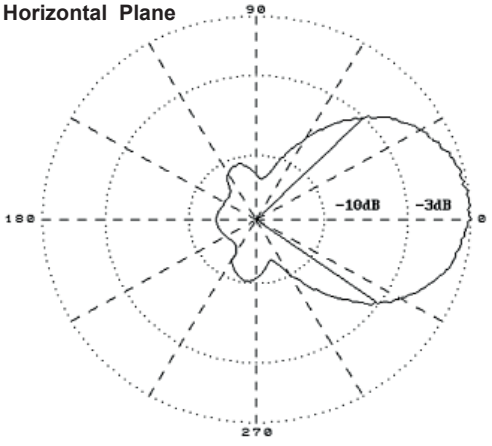
Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1300 x 1045
Weight (kg)	2.8

Radiation Patterns

Vertical Plane



Horizontal Plane



DIRECTIONAL ANTENNAS

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YAGI 8 ELEMENTS UHF ANTENNA

345 ÷ 365 MHz

SY 153

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 3 elements
Frequency Band (MHz)		144 ÷ 175
Impedance (Ω)		50
VSWR at resonant frequency		≤1.6
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	70
	Horizontal plane	140
Gain (dBd)		5.5
Front to back Ratio (dBd)		>17
Continuous Max Power (W)		200

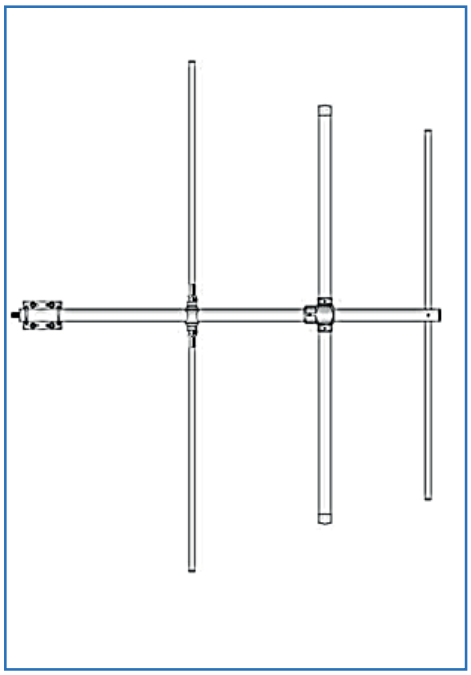
Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1150 x 1100
Weight (kg)	3.6

DESCRIPTION:

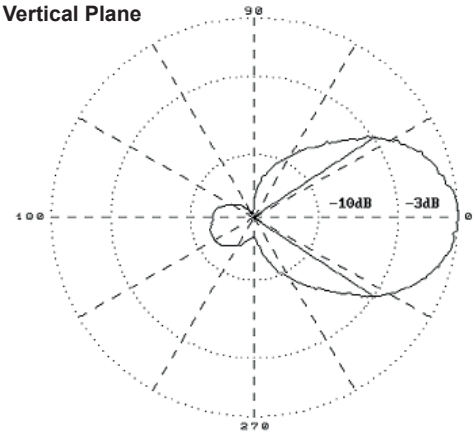
Yagi 3 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

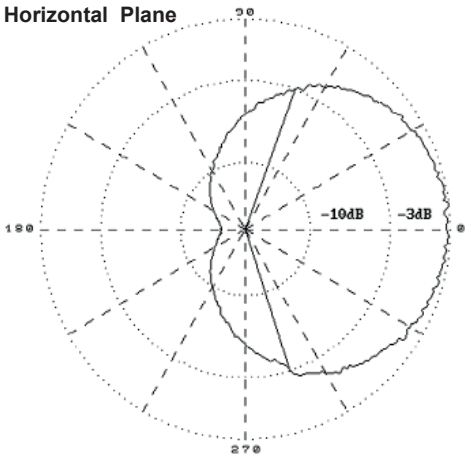


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 3 ELEMENTS VHF ANTENNA

146 ÷ 167 MHz

R-Y 313 NH

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Electrical Specifications

Type		Yagi 3 elements
Frequency Band (MHz)		146 ÷ 167
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	68
	Horizontal plane	120
Gain (dBd)		5
Front to back Ratio (dBd)		> 16
Continuous Max Power (W)		150

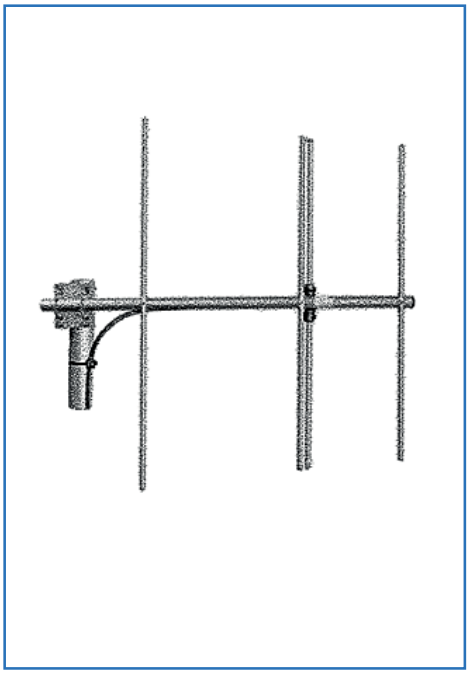
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	980 x 1215
Weight (kg)	2.7

DESCRIPTION:

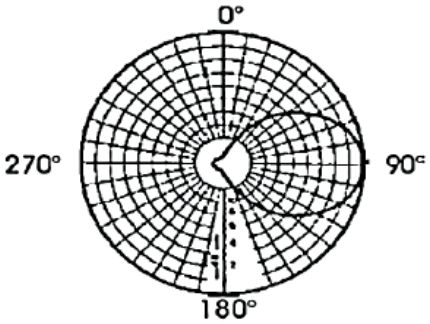
Yagi 3 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

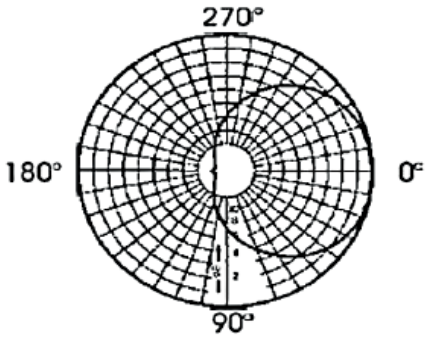


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 4 ELEMENTS VHF ANTENNA

146 ÷ 167 MHz

R-Y 413 NH

PMR

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DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 4 elements
Frequency Band (MHz)		146 ÷ 167
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	60
	Horizontal plane	84
Gain (dBd)		7
Front to back Ratio (dBd)		>17
Continuous Max Power (W)		150

Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	980 x 1515
Weight (kg)	3.2

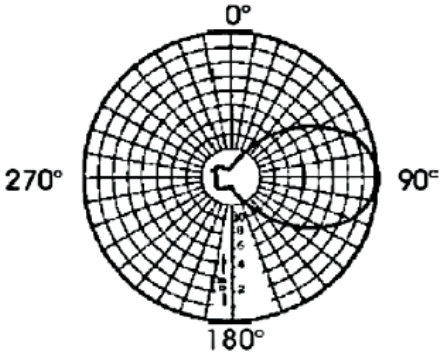
DESCRIPTION:

Yagi 4 elements antenna for VHF band.

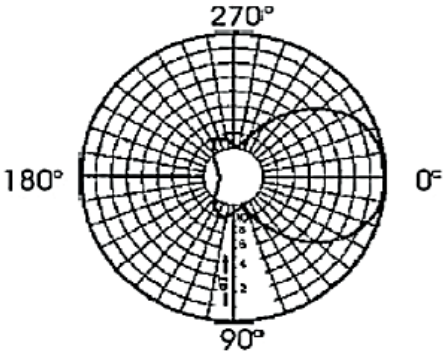
All parts of the antenna are DC grounded from lightning protection.

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 6 ELEMENTS VHF ANTENNA

146 ÷ 156 MHz

R-Y 610 NG

PMR

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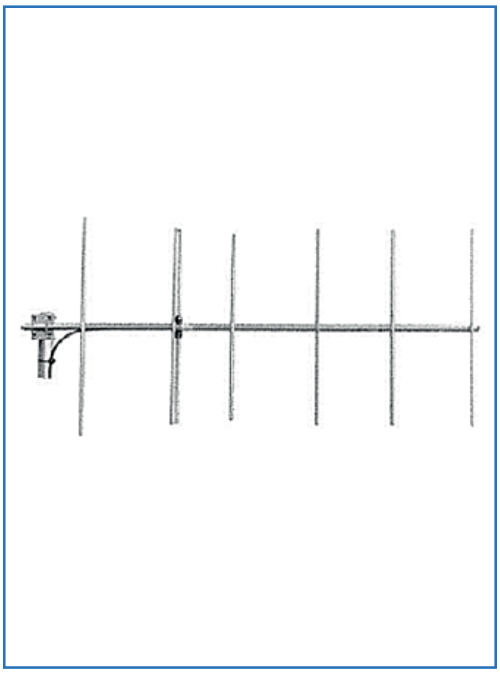
Electrical Specifications

Type		Yagi 6 elements
Frequency Band (MHz)		146 ÷ 156
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	54
	Horizontal plane	72
Gain (dBd)		8
Front to back Ratio (dBd)		> 23
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 6 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

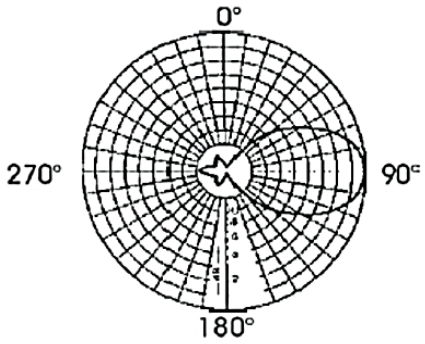


Mechanical Specifications

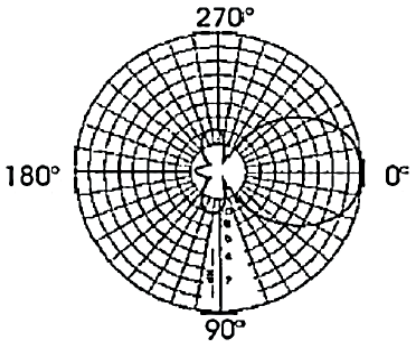
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	990 x 1915
Weight (kg)	3.9

Radiation Patterns

Vertical Plane



Horizontal Plane



DIRECTIONAL ANTENNAS

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YAGI 2 ELEMENTS VHF ANTENNA

149 ÷ 174 MHz

SY 152

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DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		149 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		≤ 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	77
	Horizontal plane	190
Gain (dBd)		3
Front to back Ratio (dBd)		>10
Continuous Max Power (W)		200

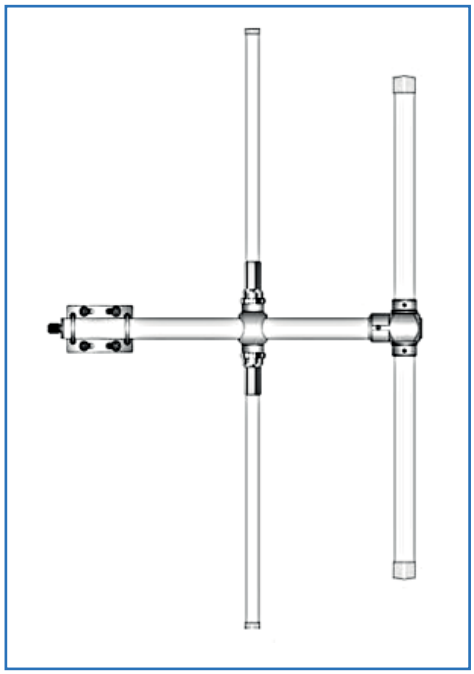
Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 60
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1150 x 790
Weight (kg)	3.3

DESCRIPTION:

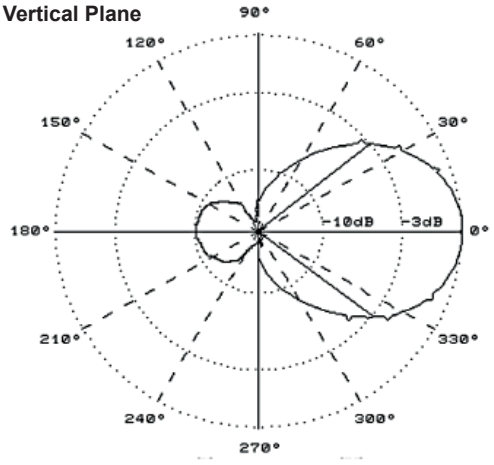
Yagi 2 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

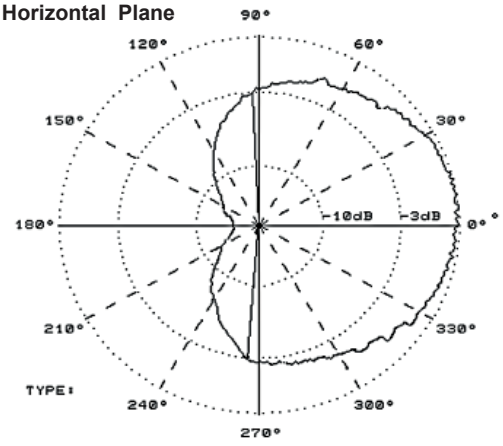


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 2 ELEMENTS VHF ANTENNA

154 ÷ 174 MHz

R-Y 212 NH

PMR

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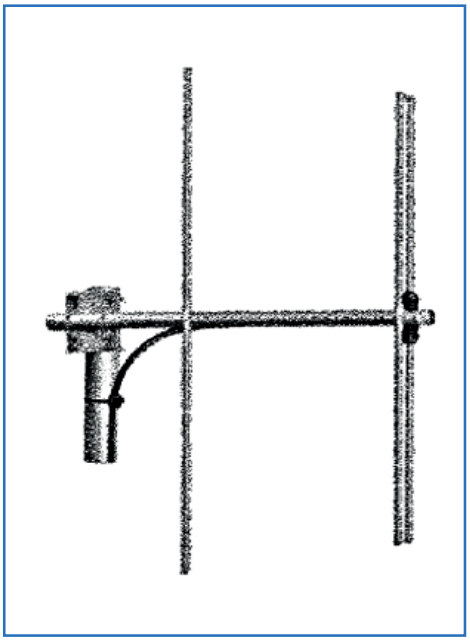
Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		154 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	170
Gain (dBd)		3
Front to back Ratio (dBd)		>9
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 2 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

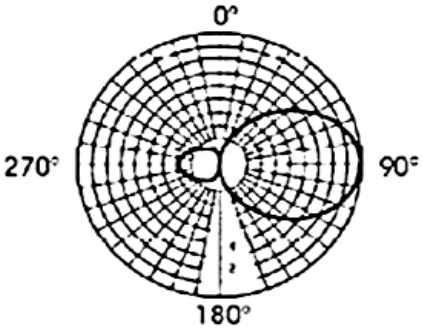


Mechanical Specifications

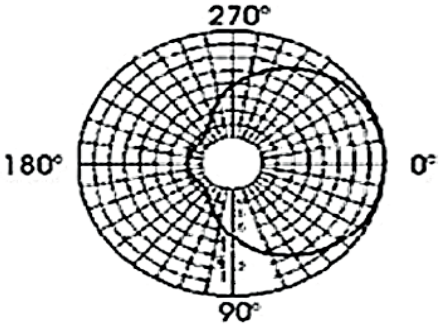
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	615 x 955
Weight (kg)	2.3

Radiation Patterns

Vertical Plane



Horizontal Plane



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DIRECTIONAL ANTENNAS

YAGI 3 ELEMENTS VHF ANTENNA

154 ÷ 174 MHz

R-Y 311 NH

PMR

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DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Yagi 3 elements
Frequency Band (MHz)		154 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	68
	Horizontal plane	120
Gain (dBd)		5
Front to back Ratio (dBd)		> 16
Continuous Max Power (W)		150

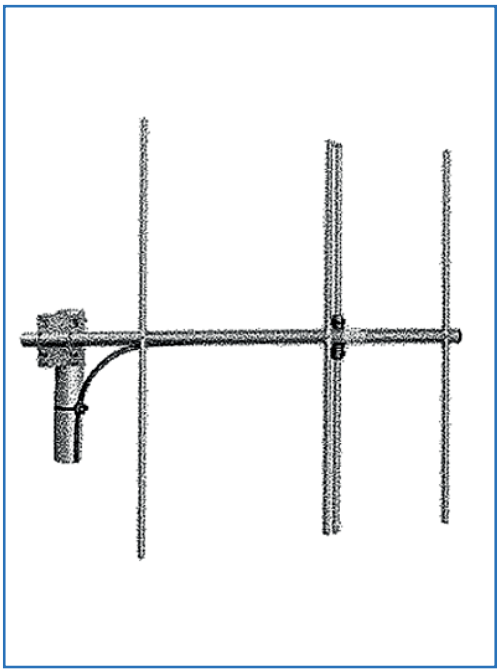
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	910 x 1215
Weight (kg)	2.9

DESCRIPTION:

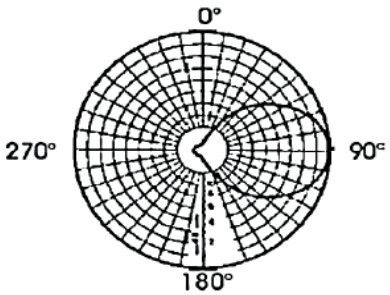
Yagi 3 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

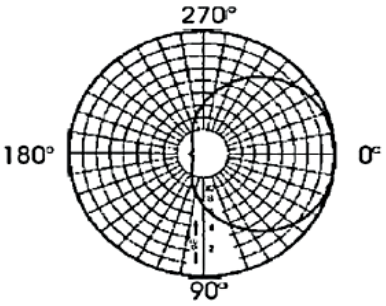


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 4 ELEMENTS VHF ANTENNA

154 ÷ 174 MHz

R-Y 411 NH

PMR

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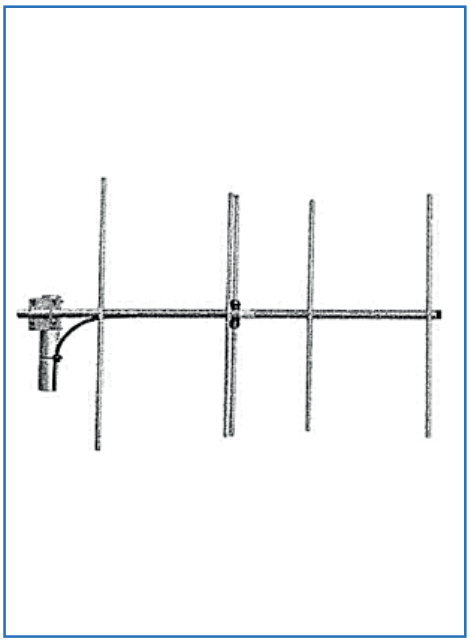
Electrical Specifications

Type		Yagi 4 elements
Frequency Band (MHz)		154 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	60
	Horizontal plane	84
Gain (dBd)		7
Front to back Ratio (dBd)		>17
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 4 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.

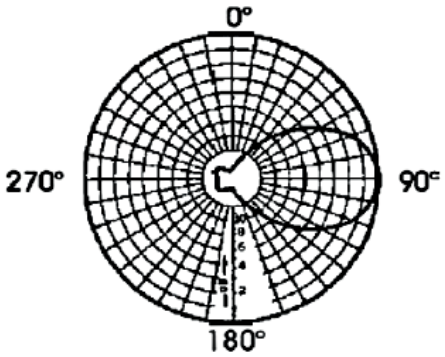


Mechanical Specifications

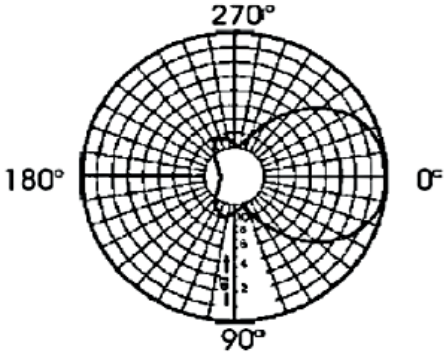
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	950 x 1515
Weight (kg)	3.1

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 4 ELEMENTS VHF ANTENNA

156 ÷ 174 MHz

SY 154 H

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DIRECTIONAL ANTENNAS

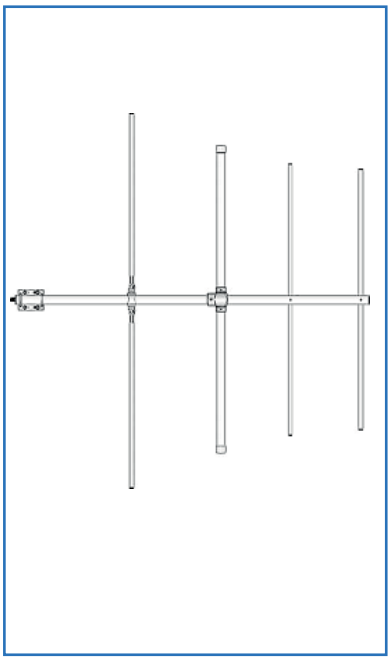
Electrical Specifications

Type		Yagi 4 elements
Frequency Band (MHz)		156 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	78
	Horizontal plane	53
Gain (dBd)		7
Front to back Ratio (dBd)		>14
Continuous Max Power (W)		200

DESCRIPTION:

Yagi 4 elements antennas for VHF band.

All parts of the antenna are DC grounded from lightning protection.

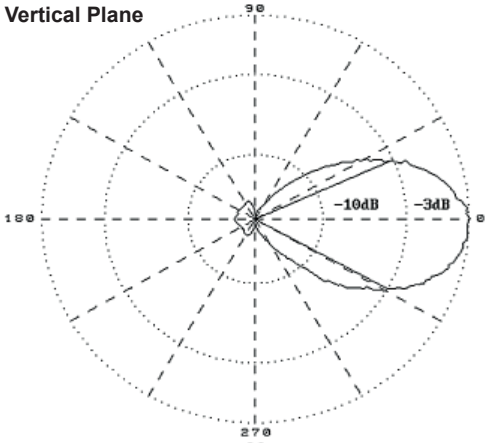


Mechanical Specifications

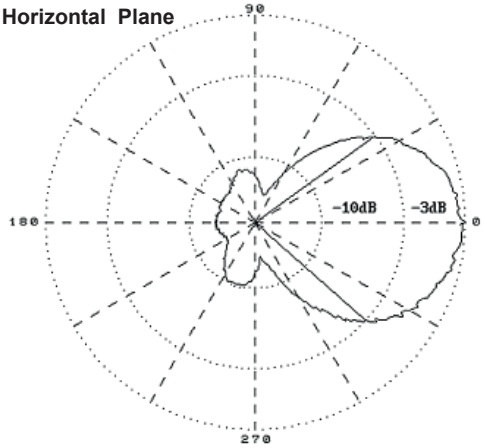
Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1748 x 964
Weight (kg)	2.4

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 6 ELEMENTS VHF ANTENNA

164 ÷ 174 MHz

R-Y 610 NH

PMR

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Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Yagi 6 elements
Frequency Band (MHz)		164 ÷ 174
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	52
	Horizontal plane	64
Gain (dBd)		8
Front to back Ratio (dBd)		>19
Continuous Max Power (W)		150

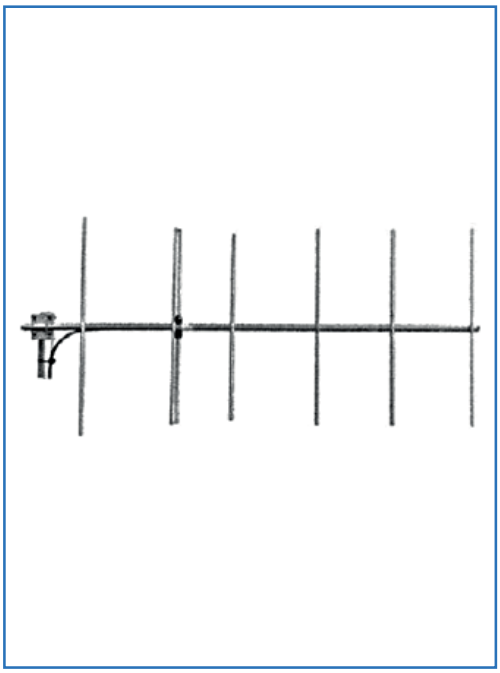
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	880 x 1805
Weight (kg)	3.7

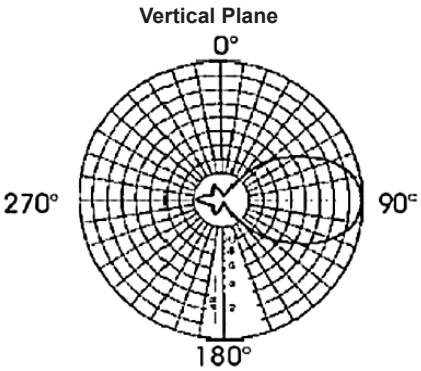
DESCRIPTION:

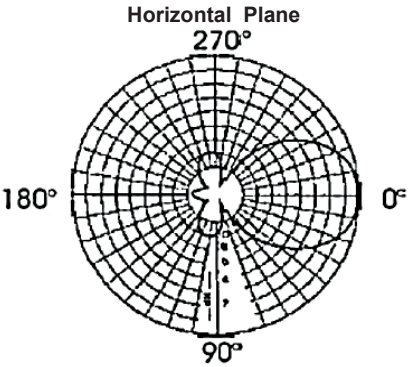
Yagi 6 elements antenna for VHF band.

All parts of the antenna are DC grounded from lightning protection.



Radiation Patterns





DIRECTIONAL ANTENNAS

By RAC

HALF WAVE CENTER FED DIPOLE UHF ANTENNA

350 ÷ 430 MHz

R-Y 011 NL

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

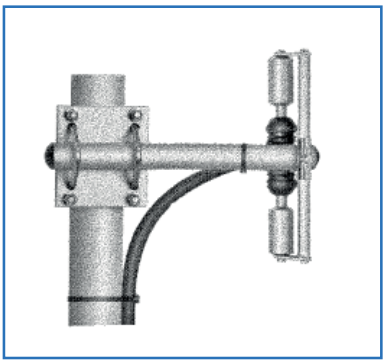
Electrical Specifications

Type		Half Wave Center Fed Dipole
Frequency Band (MHz)		350 ÷ 430
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		150

DESCRIPTION:

Half wave center fed dipole antenna for UHF band.

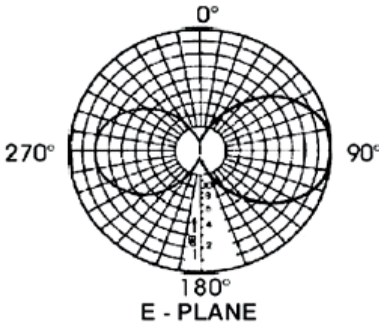
All parts of the antenna are DC grounded from lightning protection.



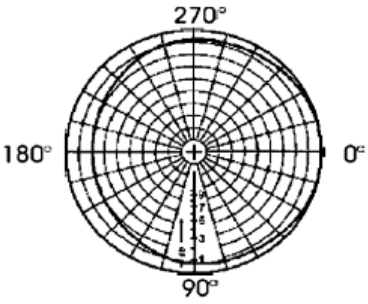
Mechanical Specifications

Type of connection	N female
Mounting hole (mm) on master tube	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	320 x 395
Weight (kg)	1.9

Radiation Patterns



E - PLANE



H - PLANE

By RAC

YAGI 8 ELEMENTS UHF ANTENNA

345 ÷ 365 MHz

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Our products can be tailored according to the customer's need.

R-Y 810 NL

PMR

Electrical Specifications

Type		Yagi 8 elements
Frequency Band (MHz)		345 ÷ 365
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	42
	Horizontal plane	47
Gain (dBd)		9
Front to back Ratio (dBd)		> 20
Continuous Max Power (W)		150

Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	460 x 1650
Weight (kg)	2.4

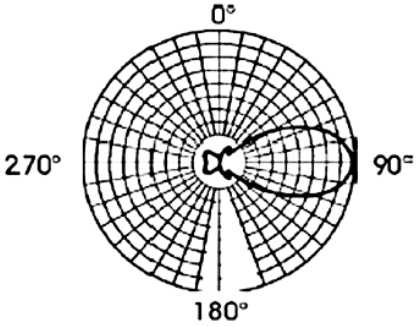
DESCRIPTION:

Yagi 8 elements antenna for UHF band.

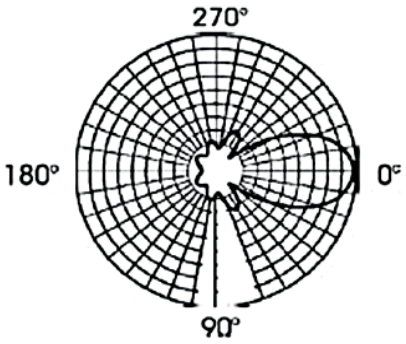
All parts of the antenna are DC grounded from lightning protection.

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 8 ELEMENTS UHF ANTENNA

380 ÷ 430 MHz

R-Y 811 NL

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Yagi 8 elements
Frequency Band (MHz)		380 ÷ 430
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	42
	Horizontal plane	48
Gain (dBd)		9
Front to back Ratio (dBd)		>18
Continuous Max Power (W)		150

Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	405 x 1500
Weight (kg)	3.1

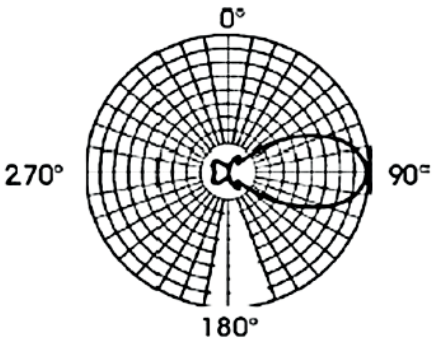
DESCRIPTION:

Yagi 8 elements antenna for UHF band.

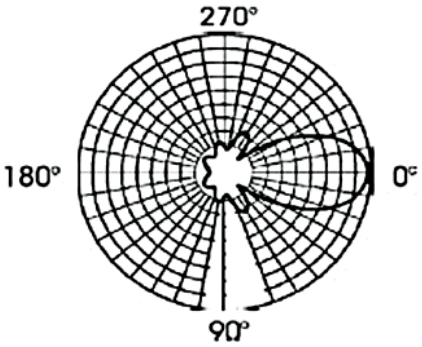
All parts of the antenna are DC grounded from lightning protection.

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 2 ELEMENTS WITH CORNER REFLECTOR UHF ANTENNA

320 ÷ 470 MHz

R1C 010 NL

PMR

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Our products can be tailored according to the customer's need.

Electrical Specifications

Product		R1C 010 NL
Type		Yagi 2 elements with corner reflector
Frequency Band (MHz)		320 ÷ 470
Impedance (Ω)		50
VSWR		< 1.5
Polarization		vertical
HPBW (deg)	Vertical plane	45
	Horizontal plane	40
Gain (dBd)		10
Continuous Max Power (W)		150

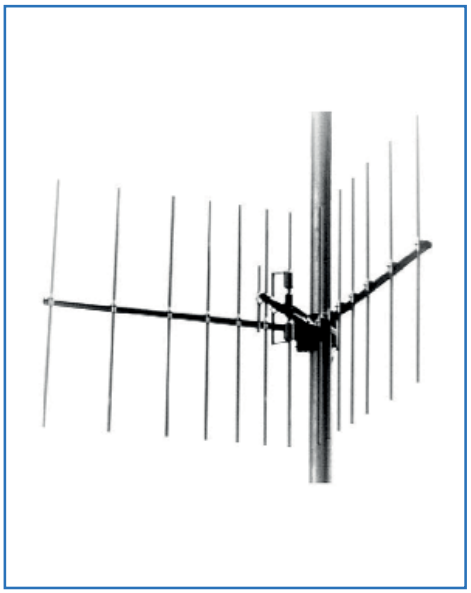
Mechanical Specifications

Product	R1C 010 NL
Type of connection	N female
Mounting hole (mm)	60 ÷ 115
Boom material	Aluminiun SURTEC 650
Elements material	Aluminiun SURTEC 650
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	1100 x 1400 x 700
Weight (kg)	9.3

DESCRIPTION:

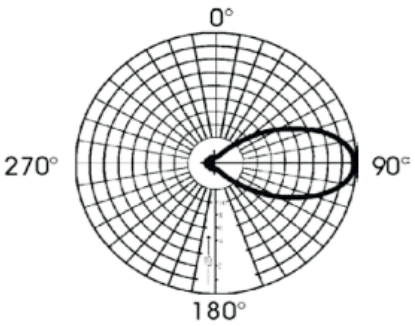
Yagi 2 elements antenna with corner reflector for UHF band.

All parts of the antenna are DC grounded from lightning protection.

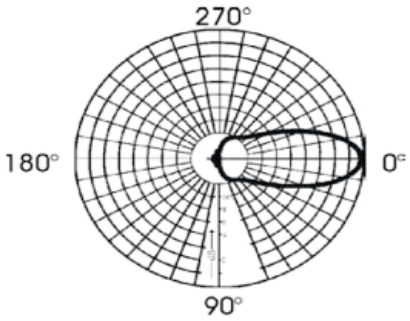


Radiation Patterns

Vertical Plane



Horizontal Plane



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HALF WAVE CENTER FED DIPOLE UHF ANTENNA

400 ÷ 470 MHz

R-Y 010 NQ

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

Electrical Specifications

Type		Half Wave Center Fed Dipole
Frequency Band (MHz)		400 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	74
	Horizontal plane	Omni
Gain (dBd)		3
Continuous Max Power (W)		150

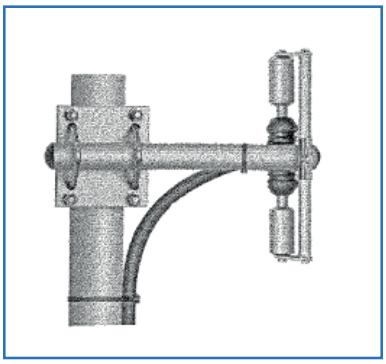
Mechanical Specifications

Type of connection	N female
Mounting hole (mm) on master tube	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	280 x 315
Weight (kg)	1.8

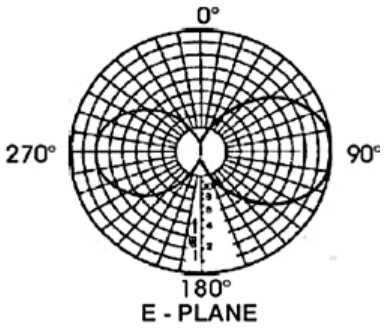
DESCRIPTION:

Half wave center fed dipole antenna for UHF band.

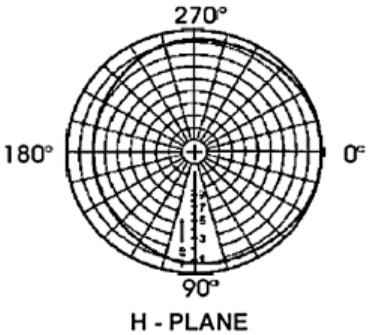
All parts of the antenna are DC grounded from lightning protection.



Radiation Patterns



E - PLANE



H - PLANE

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YAGI 2 ELEMENTS UHF ANTENNA

400 ÷ 435 MHz

SY 452 L

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

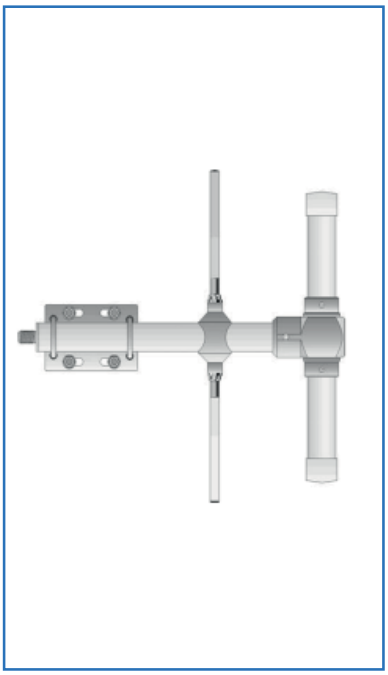
Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		400 ÷ 435
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	75
	Horizontal plane	137
Gain (dBd)		3
Front to back Ratio (dBd)		>11
Continuous Max Power (W)		200

DESCRIPTION:

Yagi 2 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

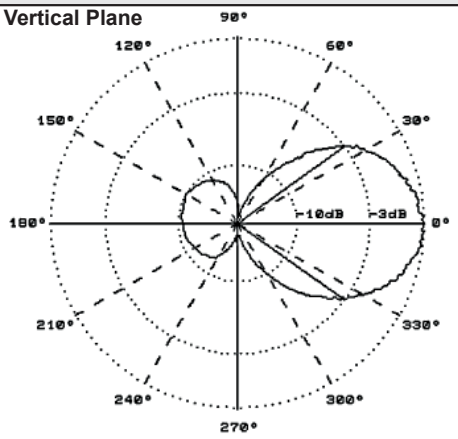


Mechanical Specifications

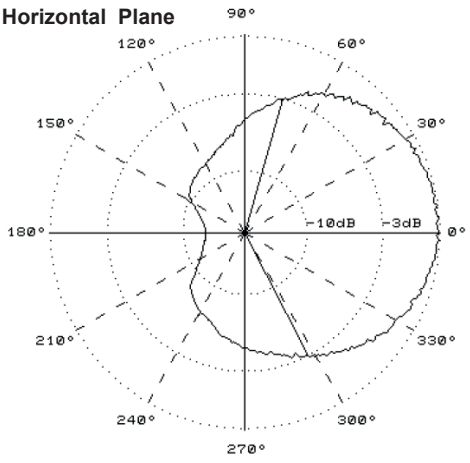
Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	500 x 450
Weight (kg)	2.0

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 3 ELEMENTS UHF ANTENNA

400 ÷ 435 MHz

SY 453 L

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

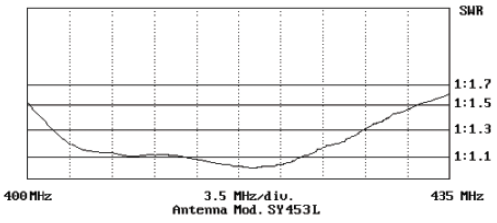
Electrical Specifications

Type	Yagi 3 elements
Frequency Band (MHz)	400 ÷ 435
Impedance (Ω)	50
VSWR at resonant frequency	<1:1.5
Polarization	vertical or horizontal
Beamwidth -3dB	H plane 68° - E plane 140°
Gain (dBd)	5.5
Continuous Max Power (W)	200

Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	630 x 410
Weight (kg)	2.0

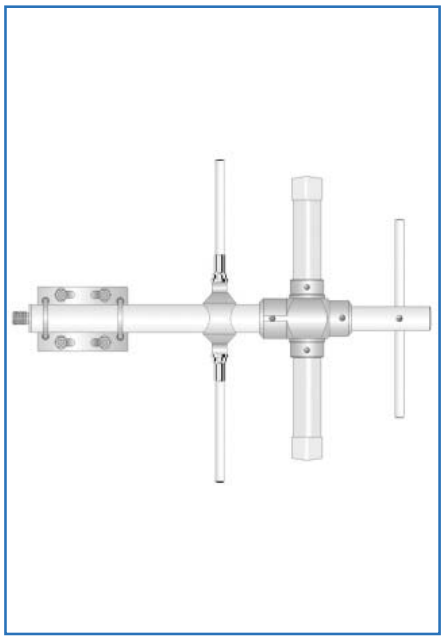
VSWR



DESCRIPTION:

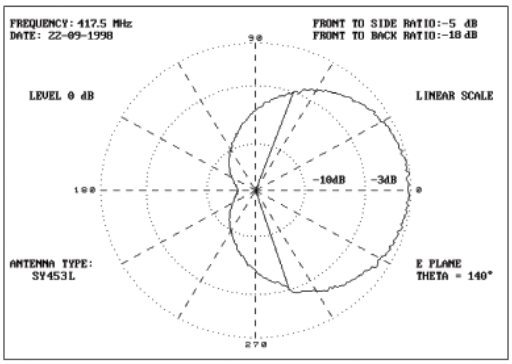
Yagi 3 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

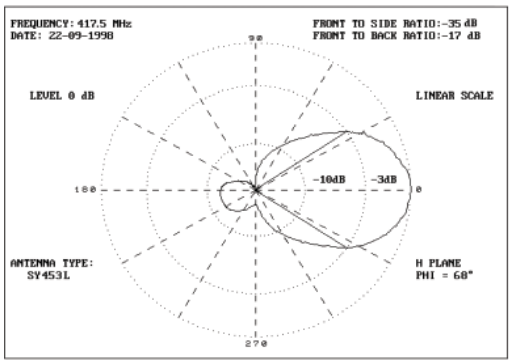


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 3 ELEMENTS UHF ANTENNA

400 ÷ 470 MHz

R-Y 310 NQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

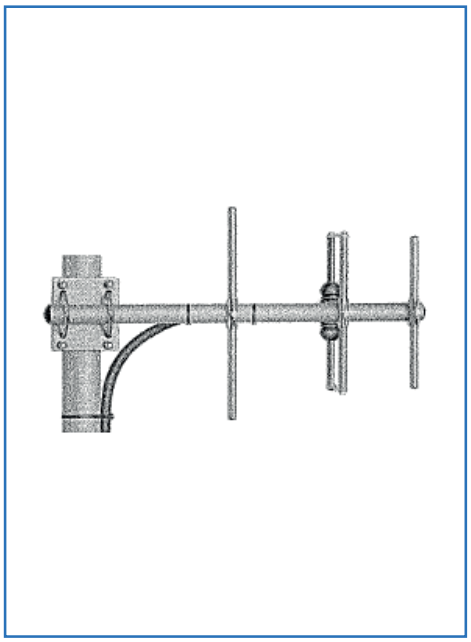
Electrical Specifications

Type		Yagi 3 elements
Frequency Band (MHz)		400 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	68
	Horizontal plane	116
Gain (dBd)		5
Front to back Ratio (dBd)		>16
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 3 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

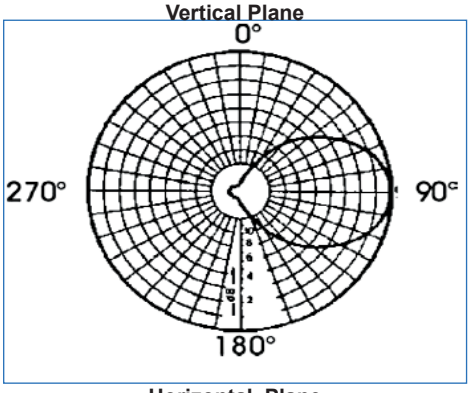


Mechanical Specifications

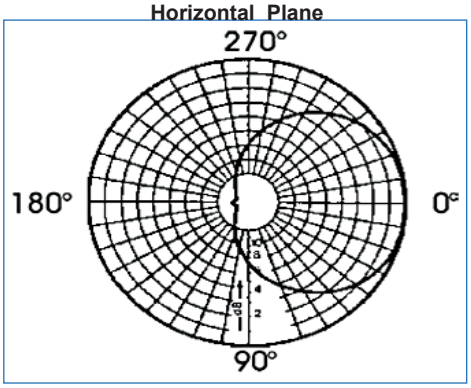
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	360 x 615
Weight (kg)	2.0

Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 6 ELEMENTS UHF ANTENNA

400 ÷ 430 MHz

R-Y 613 NQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

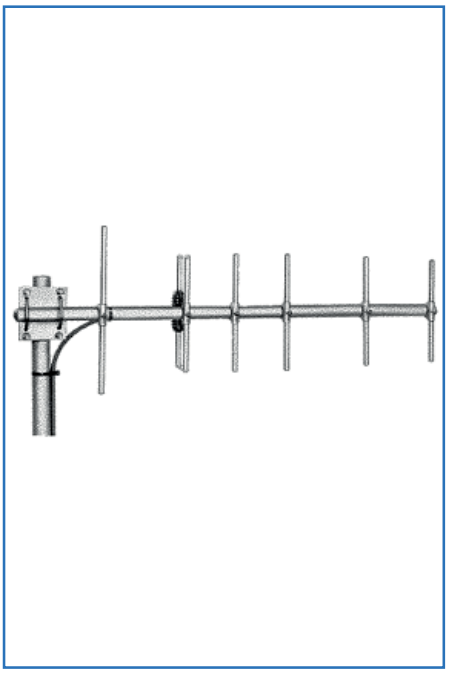
Electrical Specifications

Type		Yagi 6 elements
Frequency Band (MHz)		400 ÷ 430
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	50
	Horizontal plane	60
Gain (dBd)		9.5
Front to back Ratio (dBd)		> 15
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 6 elements antenna for UHF band.

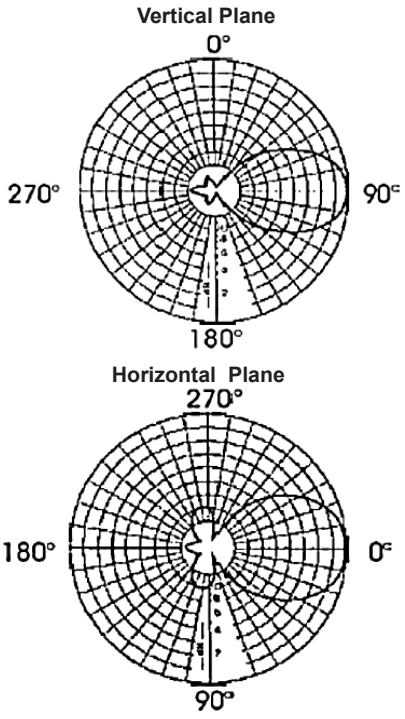
All parts of the antenna are DC grounded from lightning protection.



Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	370 x 1400
Weight (kg)	2.8

Radiation Patterns



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YAGI 6 ELEMENTS UHF ANTENNA

400 ÷ 445 MHz

R-Y 611 NQ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

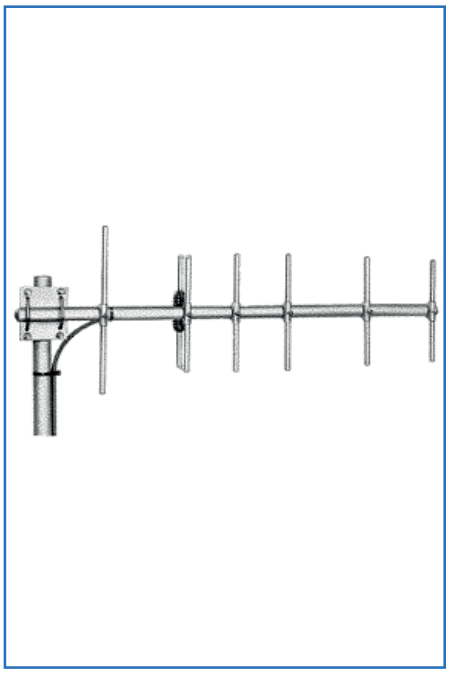
Electrical Specifications

Type		Yagi 6 elements
Frequency Band (MHz)		400 ÷ 445
Impedance (Ω)		50
VSWR at resonant frequency		<1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	50
	Horizontal plane	60
Gain (dBd)		8.5
Front to back Ratio (dBd)		>15
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 6 elements antenna for UHF band.

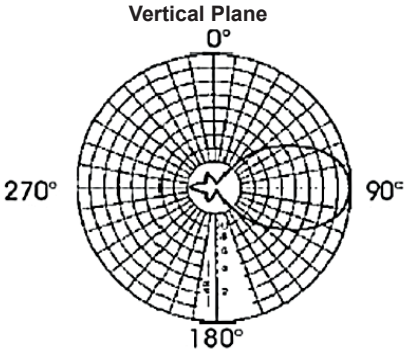
All parts of the antenna are DC grounded from lightning protection.

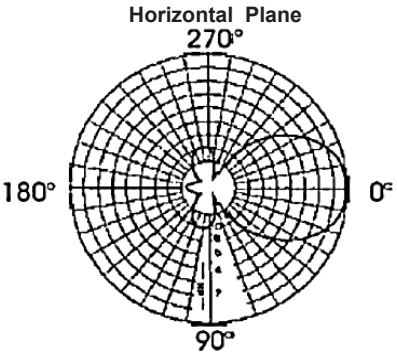


Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	380 x 1215
Weight (kg)	2.7

Radiation Patterns





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DIRECTIONAL ANTENNAS

YAGI 12 ELEMENTS UHF ANTENNA

400 ÷ 470 MHz

R1Y 210 NQ

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

Electrical Specifications

Product		R1Y 210 NQ
Type		Yagi 12 elements
Frequency Band (MHz)		400 ÷ 470
Impedance (Ω)		50
VSWR		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	40
	Horizontal plane	42
Gain (dBd)		11
Front to back Ratio (dBd)		>22
Continuous Max Power (W)		150

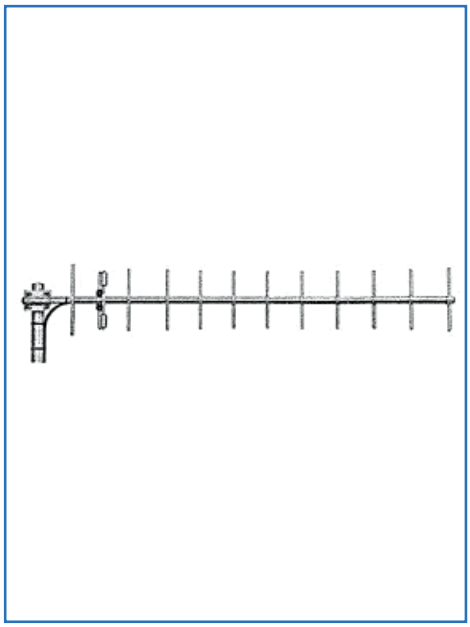
Mechanical Specifications

Product	R1Y 210 NQ
Type of connection	N female
Mounting hole (mm)	30 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	360 x 1815
Weight (kg)	3.9

DESCRIPTION:

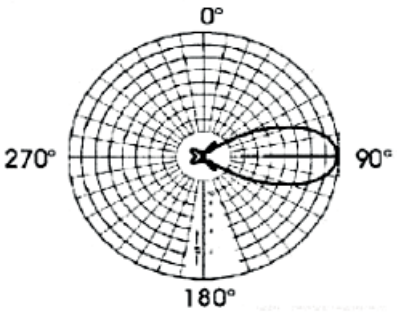
Yagi 12 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

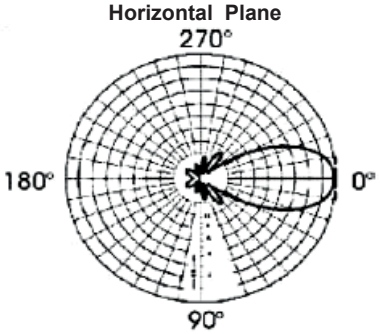


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 2 ELEMENTS UHF ANTENNA

435 ÷ 470 MHz

SY 452 H

PMR

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Electrical Specifications

Type		Yagi 2 elements
Frequency Band (MHz)		435 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	75
	Horizontal plane	137
Gain (dBd)		3
Front to back Ratio (dBd)		>11
Continuous Max Power (W)		200

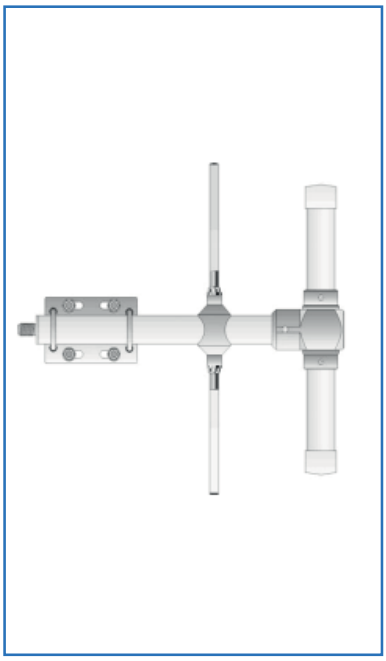
Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	500 x 450
Weight (kg)	2.0

DESCRIPTION:

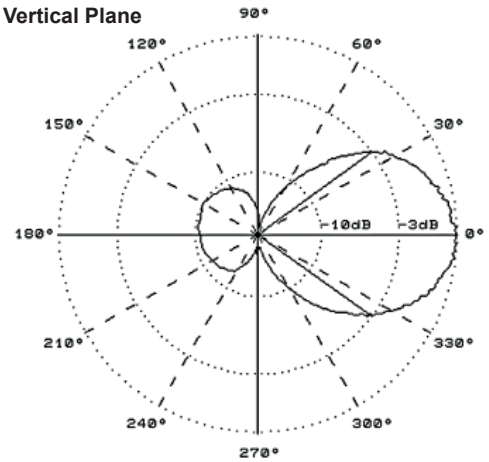
Yagi 2 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

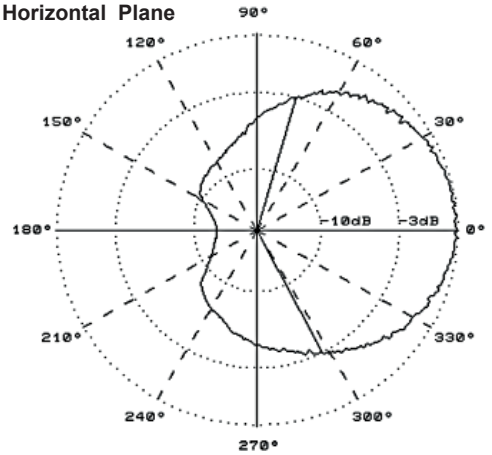


Radiation Patterns

Vertical Plane



Horizontal Plane



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YAGI 3 ELEMENTS UHF ANTENNA

435 ÷ 470 MHz

SY 453 H

PMR

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Our products can be tailored according to the customer's need.

DIRECTIONAL ANTENNAS

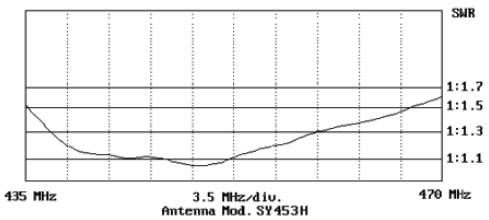
Electrical Specifications

Type	Yagi 3 elements
Frequency Band (MHz)	435 ÷ 470
Impedance (Ω)	50
VSWR at resonant frequency	<1:1.5
Polarization	vertical or horizontal
Beamwidth -3dB	H plane 68° - E plane 140°
Gain (dBd)	5.5
Continuous Max Power (W)	200

Mechanical Specifications

Type of connection	N female
Mounting hole on master tube (mm)	30 ÷ 62
Radiator Coverage	Fiberglass
Boom material	Anodized Aluminium
Elements material	Anodized Aluminium
Wind resistance (km/h)	120
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	630 x 410
Weight (kg)	2.0

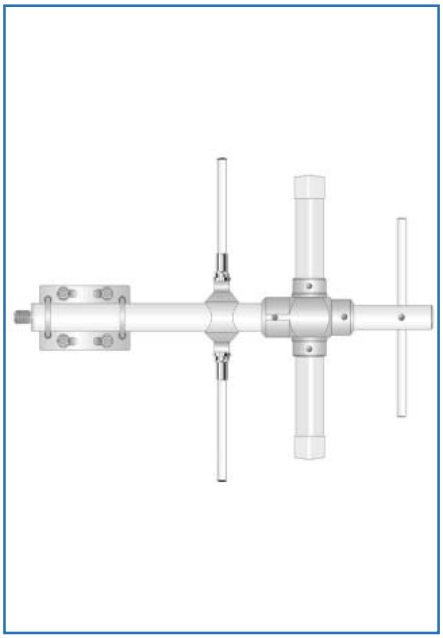
VSWR



DESCRIPTION:

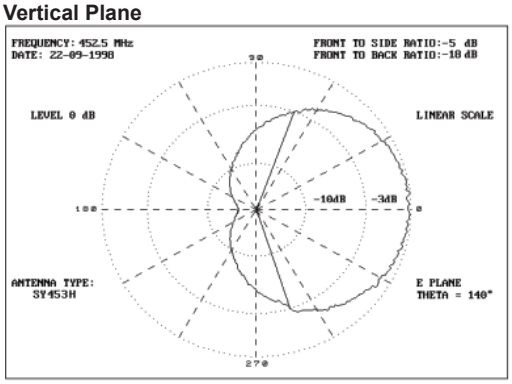
Yagi 3 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

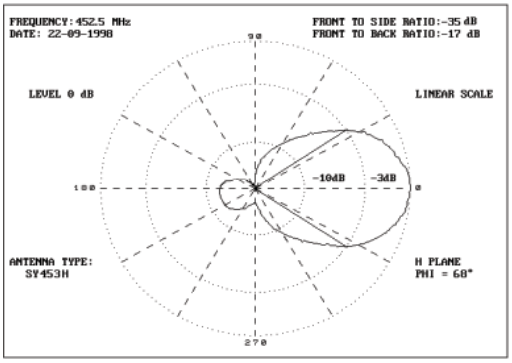


Radiation Patterns

Vertical Plane



Horizontal Plane



By λεα LEANTENNE

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YAGI 6 ELEMENTS UHF ANTENNA

435 ÷ 470 MHz

R-Y 611 NZ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

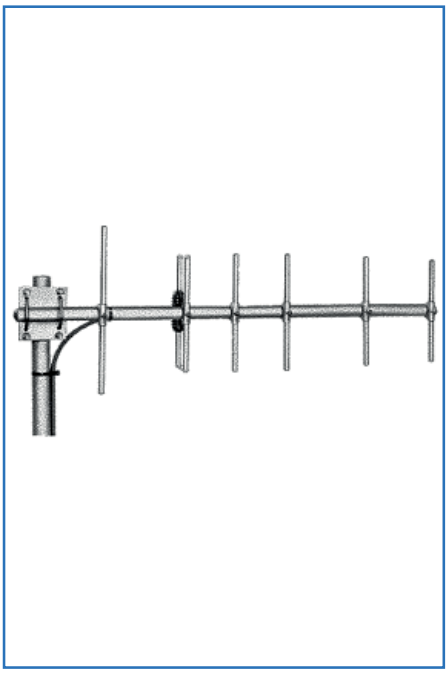
Electrical Specifications

Type		Yagi 6 elements
Frequency Band (MHz)		435 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	50
	Horizontal plane	60
Gain (dBd)		8
Front to back Ratio (dBd)		> 15
Continuous Max Power (W)		150

DESCRIPTION:

Yagi 6 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

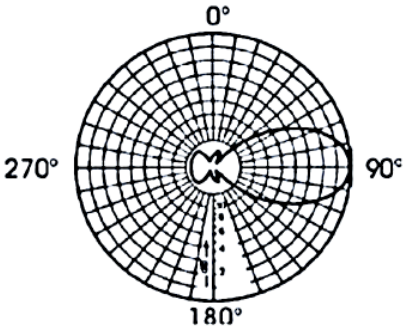


Mechanical Specifications

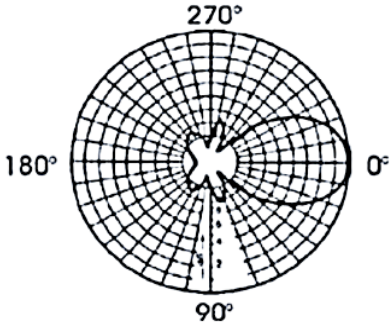
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	360 x 1015
Weight (kg)	2.6

Radiation Patterns

Vertical Plane



Horizontal Plane



DIRECTIONAL ANTENNAS

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YAGI 7 ELEMENTS UHF ANTENNA

450 ÷ 470 MHz

R-Y 710 NZ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Type		Yagi 7 elements
Frequency Band (MHz)		450 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		< 1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	38
	Horizontal plane	42
Gain (dBd)		8
Front to back Ratio (dBd)		>15
Continuous Max Power (W)		150

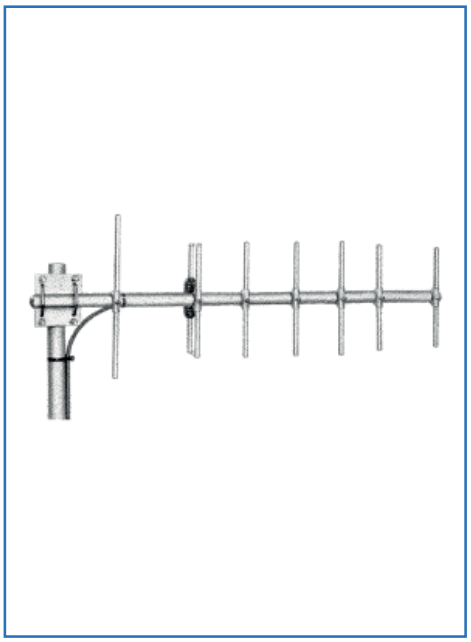
Mechanical Specifications

Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	330 x 1500
Weight (kg)	2.9

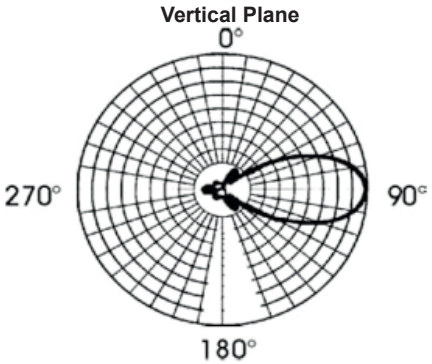
DESCRIPTION:

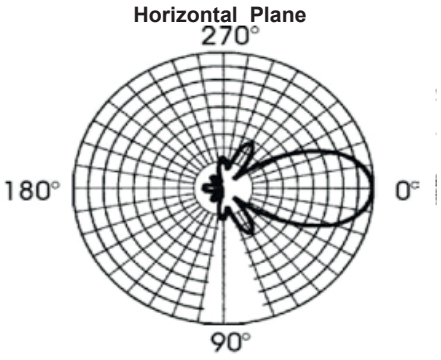
Yagi 7 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.



Radiation Patterns





By RAC

YAGI 12 ELEMENTS UHF ANTENNA

450 ÷ 470 MHz

R1Y 210 NZ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Product		R1Y 210 NZ
Type		Yagi 12 elements
Frequency Band (MHz)		450 ÷ 470
Impedance (Ω)		50
VSWR		<1.5
Polarization		vertical or horizontal
HPBW (deg)	Vertical plane	38
	Horizontal plane	40
Gain (dBd)		11
Front to back Ratio (dBd)		>18
Continuous Max Power (W)		150

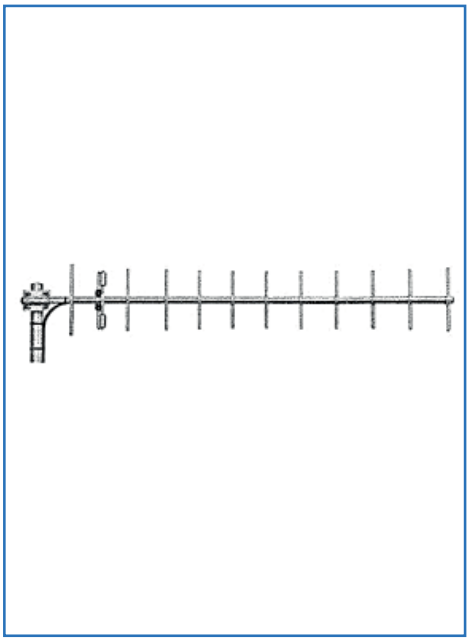
Mechanical Specifications

Product	R1Y 210 NZ
Type of connection	N female
Mounting hole (mm)	33 ÷ 60
Boom material	Aluminium alloy DIN 3.2315
Elements material	Aluminium alloy DIN 3.2306
Wind resistance (km/h)	160
Temperature range (°C)	-35 ÷ +80
Dimensions (mm)	325 x 1815
Weight (kg)	3.9

DESCRIPTION:

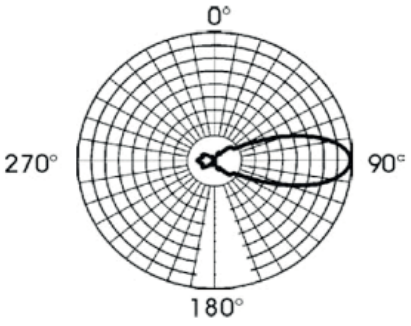
Yagi 12 elements antenna for UHF band.

All parts of the antenna are DC grounded from lightning protection.

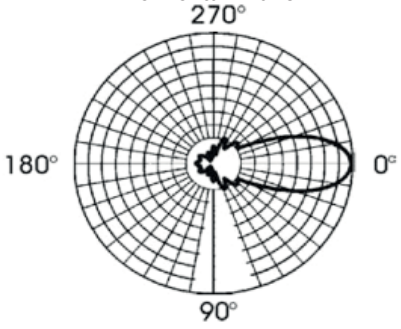


Radiation Patterns

Vertical Plane



Horizontal Plane



By RAC

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TETRACUBE PANEL X-POL ANTENNA

380 ÷ 470 MHz

17400011

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>35
Polarization (deg)		±45
Gain (dBi)		2 x 5.5
HPBW (deg)	Horizontal plane	105
	Vertical plane	105
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

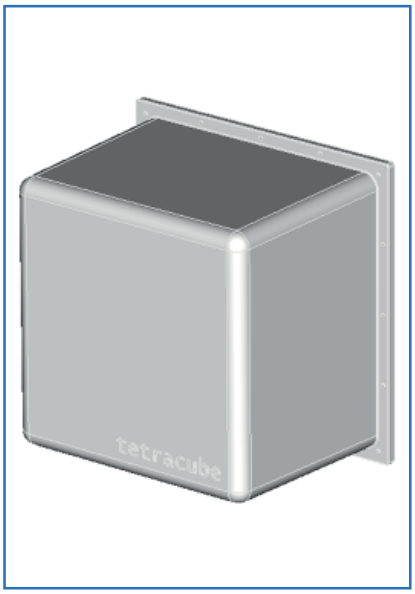
DESCRIPTION:

TETRACUBE panel X-pol antenna.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

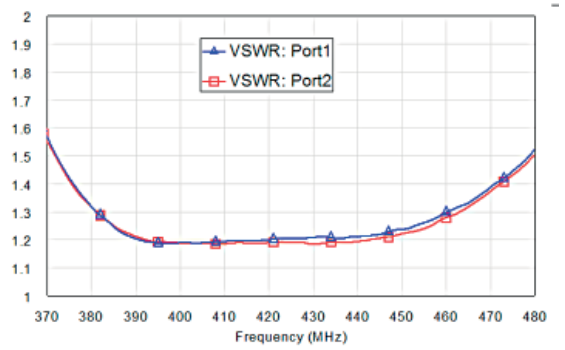
DC grounded from lightning protections.



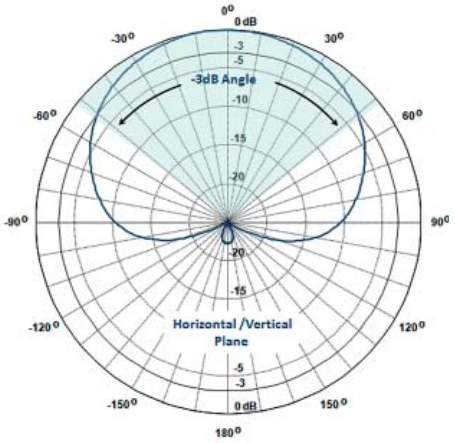
Mechanical Specifications

Type of connections	2 x N female
Dimensions (mm) H/W/D	270 x 270 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Re-arside
	100 / 95 / 110
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	2.4

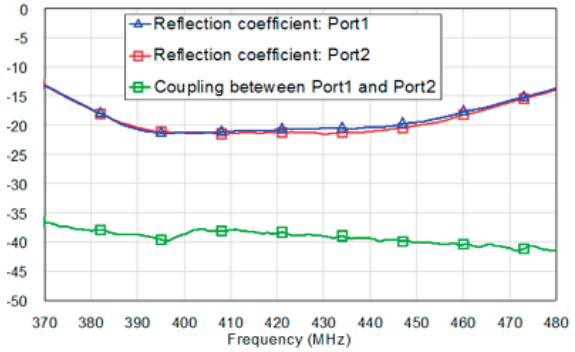
VSWR



Radiation Pattern



Scattering Parameters



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PANEL ANTENNAS

TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 2X1

380 ÷ 470 MHz

17400021

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>25
Polarization (deg)		±45
Gain (dBi)		2 x 9.2
HPBW (deg)	Horizontal plane	105
	Vertical plane	38
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

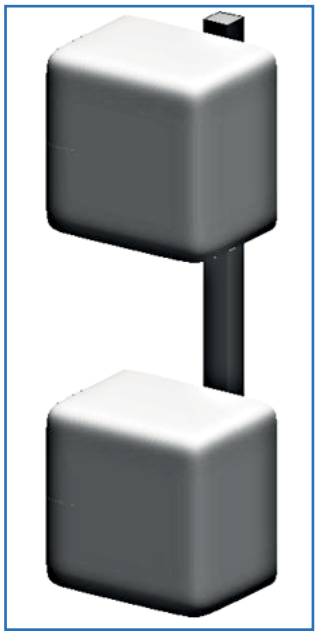
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 2x1 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

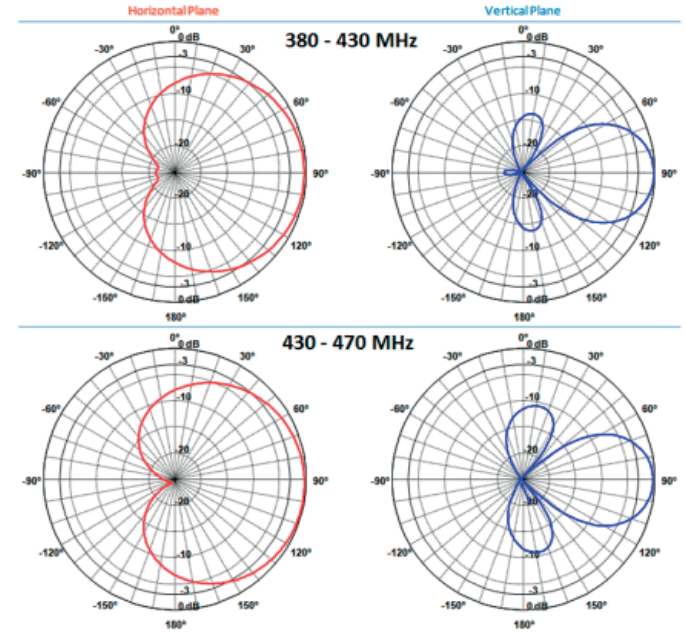
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	1030 x 270 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	230 / 190 / 250
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	7.5

Radiation Patterns



PANEL ANTENNAS

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TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 3X1

380 ÷ 470 MHz

17400031

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>20
Polarization (deg)		±45
Gain (dBi)		2 x 11
HPBW (deg)	Horizontal plane	105
	Vertical plane	24
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

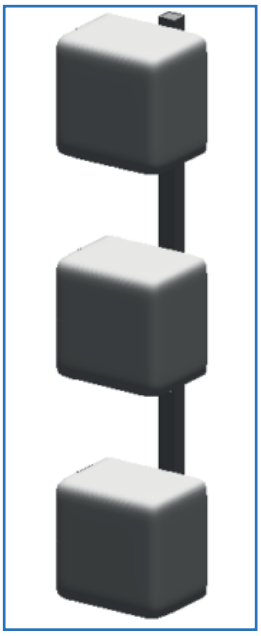
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 3x1 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

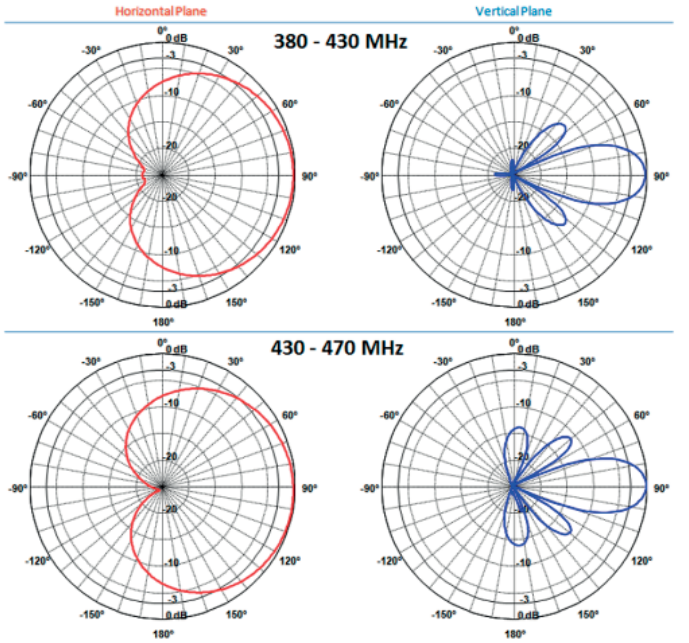
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	1580 x 270 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	320 / 280 / 340
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	11

Radiation Patterns



PANEL ANTENNAS

By λεα LEANTENNE

TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 4X1

380 ÷ 470 MHz

17400041

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>20
Polarization (deg)		±45
Gain (dBi)		2 x 12.5
HPBW (deg)	Horizontal plane	105
	Vertical plane	18
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

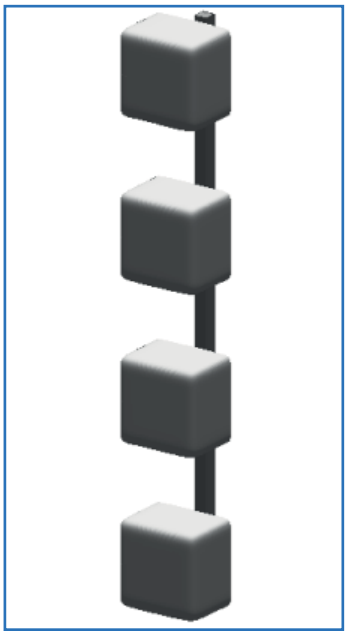
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 4x1 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental condition as described in ETS 300 019-1-4.

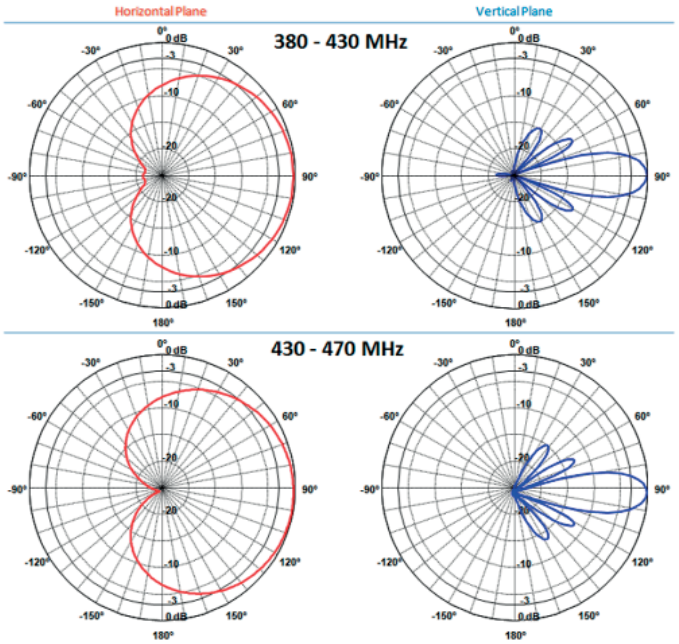
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	2130 x 270 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	460 / 420 / 500
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	14.5

Radiation Patterns



PANEL ANTENNAS

By λεα LEANTENNE

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TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 2X2

380 ÷ 470 MHz

17400022

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>25
Polarization (deg)		±45
Gain (dBi)		2 x 12.8
HPBW (deg)	Horizontal plane	42
	Vertical plane	38
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

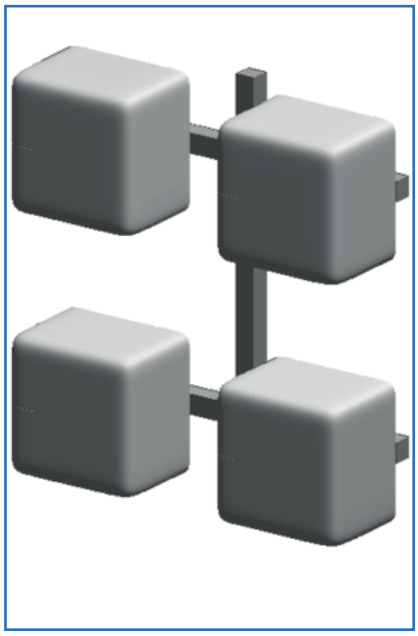
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 2x2 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

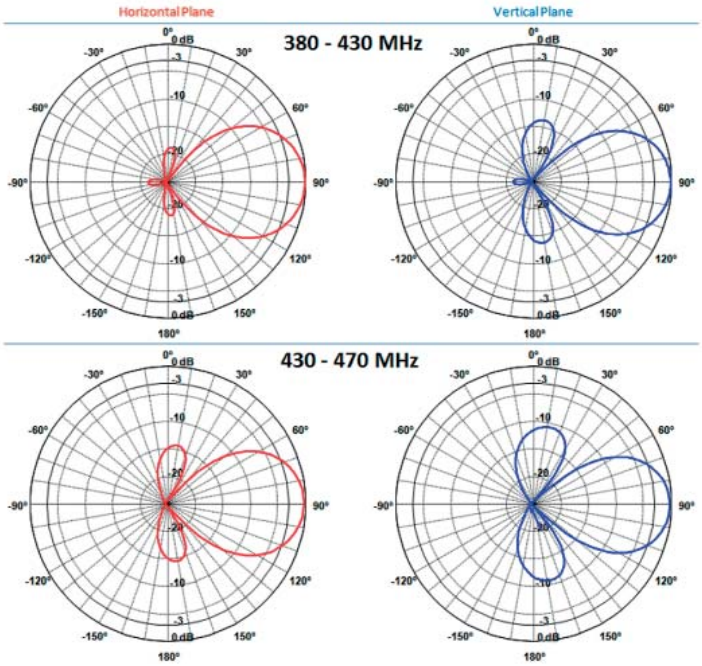
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	1030 x 720 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	480 / 380 / 510
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	17

Radiation Patterns



PANEL ANTENNAS

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TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 3X2

380 ÷ 470 MHz

17400032

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR		≤1.5
Isolation between channels (dB)		>25
Polarization (deg)		±45
Gain (dBi)		2 x 14.5
HPBW (deg)	Horizontal plane	42
	Vertical plane	24
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

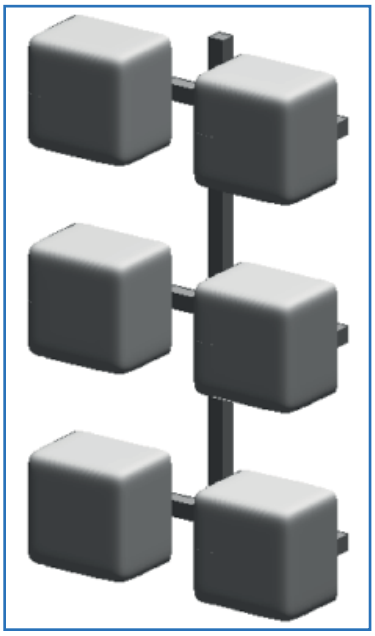
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 3x2 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

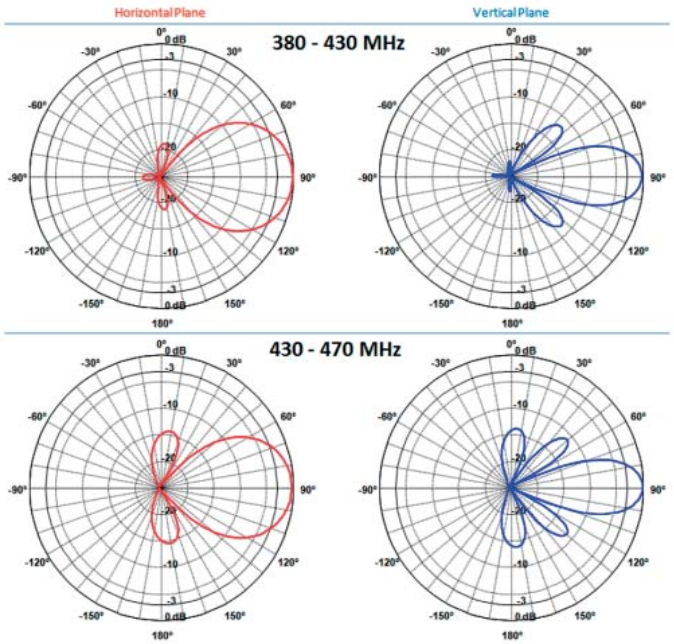
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	1370 x 720 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	660 / 300 / 700
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	24.5

Radiation Patterns



PANEL ANTENNAS

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TETRACUBE PANEL X-POL ANTENNA CONFIGURATION 4X2

380 ÷ 470 MHz

17400042

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band VHF (MHz)		380 ÷ 470
Impedance (Ω)		50
VSWR at resonant frequency		≤1.5
Isolation between channels (dB)		>25
Polarization (deg)		±45
Gain (dBi)		2 x 16
HPBW (deg)	Horizontal plane	42
	Vertical plane	18
Front-to-Back ratio (dB)		>27
Electrical DownTilt (deg)		0
Intermodulation 3rd order (dBc)		<-150
Max RF Power (W)		500

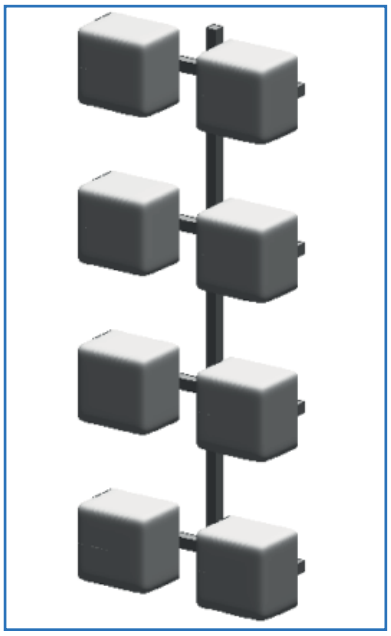
DESCRIPTION:

TETRACUBE panel X-pol antennas in array configuration for 4x2 elements.

Two inputs, wide HPBW angle and low Front-to-Back ratio.
Reduced dimensions, light weight and very rugged radome.
High maximum input power.
No ground plane needed.

Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

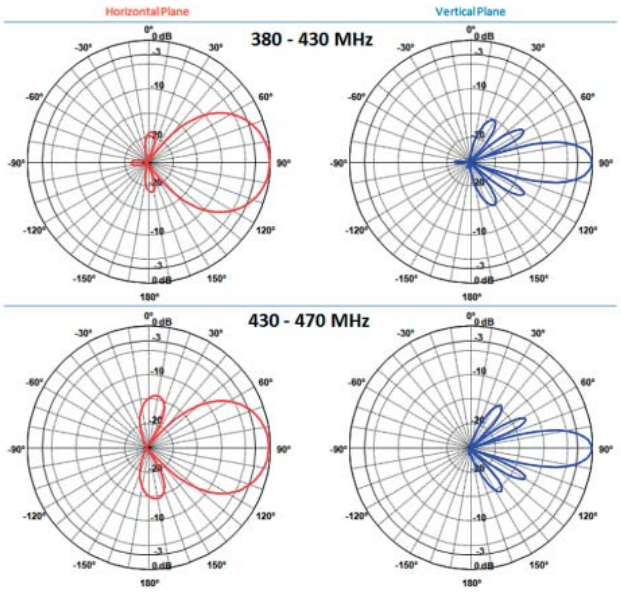
DC grounded from lightning protections.



Mechanical Specifications

Type of connections	2 x7/16 female
Dimensions (mm) H/W/D	1940 x 720 x 192
Wind load (N) @ 150 km/h	Frontal / Lateral / Rearside
	880 / 400 / 920
Temperature range (°C)	-40 ÷ + 70
Total weight (kg)	31.5

Radiation Patterns



PANEL ANTENNAS

By λεα LEANTENNE

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SMALL PANEL TETRA ANTENNA

90°, VERTICAL POL, INDOOR/OUTDOOR

380 ÷ 405 and 405 ÷ 430 MHz

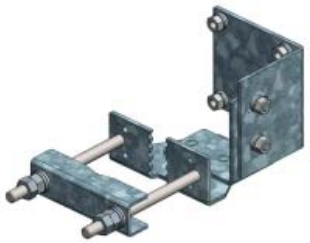
T01211406

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

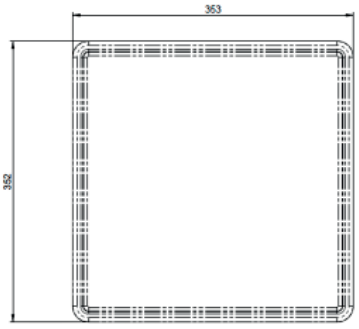
Frequency Band (MHz)	**T01211406**	380 ÷ 405
	T01211407	405 ÷ 430
Impedance (Ω)		50
VSWR		< 2
Polarization		linear: vertical
HPBW (deg)	Vertical Plane	70 ± 5
	Horizontal Plane	90 ± 5
Gain (dBi)		7
Continuous Max. Power (W)		50
Operating Temperature Range (°C)		-40 ÷ +70
Lightining Protection		DC grounded

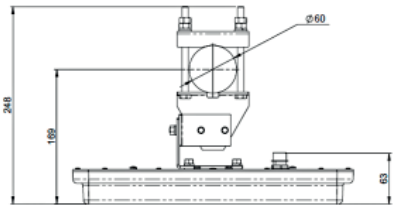


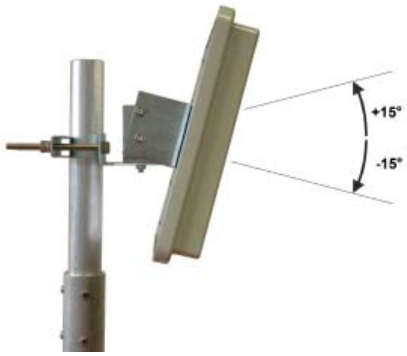
wall and pole mounting

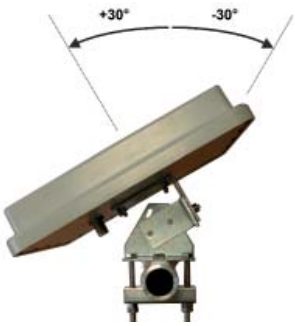
Mechanical Specifications

Connector	N f
Dimensions (mm)	353 × 353 × 43
Colour	RAL 7035 gray
Weight (Kg)	1.9
Mounting	on pole or wall
RoHS	compliant
Enviromental Tests	ETSI 300-019-2









Shipment Specifications

Packing	Cardboard Box
Dimensions (mm)	430 x 380 x 75
Weight	2.4

PANEL ANTENNAS

By TELSA

We reserve the right to modify these data without any notice

TETRA PANEL ANTENNA

8 dBi, 120°

380 ÷ 430 MHz

T01221409

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

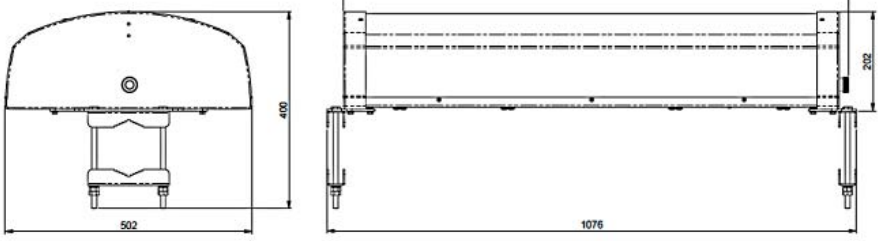
PANEL ANTENNAS

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	120 ± 3
HPBW (deg) Vertical Plane	30 ± 2
Gain (dBi)	8
Front to Back ratio (dB)	< 25
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		1000 × 500 × 200
Weight (Kg)		12
Wind Load (N) @ 150 Km/h	frontal	635
	lateral	275
	rearside	705
Colour		Grey RAL 7035
Mounting		by clamps on pole Ø 40 ÷ 120 mm



Options

Mechanical downtilt (deg)	0 ÷ 10

By TELSA

TETRA PANEL ANTENNA

9.5 dBi, 90°

380 ÷ 430 MHz

T01221404

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

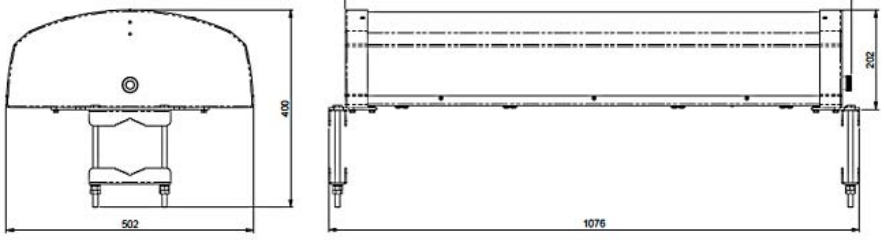
Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	90 ± 3
HPBW (deg) Vertical Plane	35 ± 2
Gain (dBi)	9.5
Front to Back ratio (dB)	> 25
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		1000 x 500 x 200
Weight (Kg)		12
Wind Load (N) @ 150 Km/h	frontal	635
	lateral	275
	rearside	705
Colour		RAL 7035 Gray
Mounting		by clamps on pole Ø 50 ÷ 115 mm

Options

Mechanical downtilt (deg)	0 ÷ 10



PANEL ANTENNAS

By TELSA

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TETRA PANEL ANTENNA

11 dBi, 120°

380 ÷ 430 MHz

T01241401

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

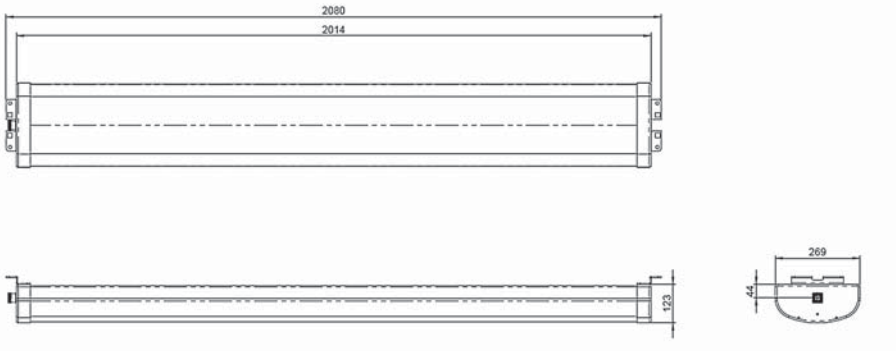
Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	120
HPBW (deg) Vertical Plane	15 ± 2
Gain (dBi)	11
Front to Back ratio (dB)	> 20
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		2000 × 250 × 120
Weight (Kg)		11
Wind Load (N) @ 150 Km/h	frontal	677
	lateral	340
	rearside	735
Colour		Grey RAL 7035
Mounting		by clamps on pole Ø 40 ÷ 120 mm

Options

Mechanical downtilt (deg)	0 ÷ 10



PANEL ANTENNAS

By TELSA

TETRA PANEL ANTENNA

11 dBi, 65°

380 ÷ 430 MHz

T01221401

PMR

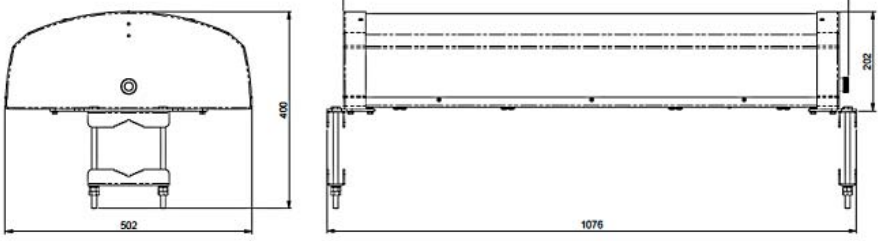
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	65 ± 3
HPBW (deg) Vertical Plane	35 ± 2
Gain (dBi)	11
Front to Back ratio (dB)	> 25
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		1000 × 500 × 200
Weight (Kg)		12
Wind Load (N) @ 150 Km/h	frontal	635
	lateral	275
	rearside	705
Colour		RAL 7035 Gray
Mounting		by clamps on pole Ø 50 ÷ 115 mm



Options

Mechanical downtilt (deg)	0 ÷ 10

PANEL ANTENNAS

By TELSA

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TETRA PANEL ANTENNA

13 dBi, 90°

380 ÷ 430 MHz

T01241408

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

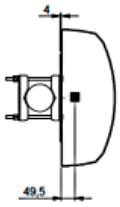
PANEL ANTENNAS

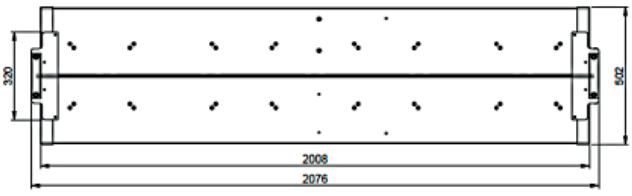
Electrical Specifications

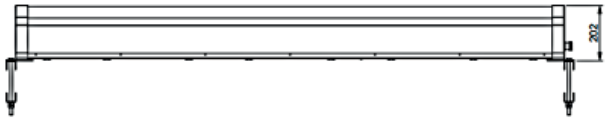
Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	90 ± 3
HPBW (deg) Vertical Plane	18 ± 1
Gain (dBi)	13
Front to Back ratio (dB)	> 20
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		2000 × 500 × 200
Weight (Kg)		20
Wind Load (N) @ 150 Km/h	frontal	1270
	lateral	550
	rearside	1410
Colour		RAL 7035 Gray
Mounting		by clamps on pole Ø 50 ÷ 115 mm







Options

Mechanical downtilt (deg)	0 ÷ 10

By TELSA

TETRA PANEL ANTENNA

14 dBi, 65°

380 ÷ 430 MHz

T01241425

PMR

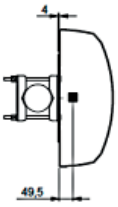
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

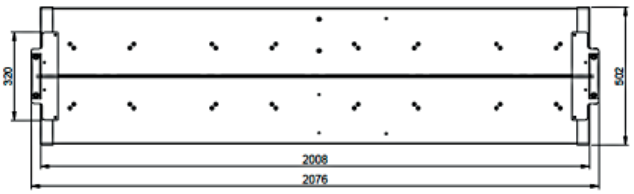
Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	linear vertical
HPBW (deg) Horizontal Plane	65 ± 2
HPBW (deg) Vertical Plane	18 ± 1
Gain (dBi)	14
Front to Back ratio (dB)	> 20
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		2000 × 500 × 200
Weight (Kg)		20
Wind Load (N) @ 150 Km/h	frontal	1270
	lateral	550
	rearside	1410
Colour		Grey RAL 7035
Mounting		by clamps on pole Ø 50 ÷ 115 mm





Options

Mechanical downtilt (deg)	0 ÷ 10

PANEL ANTENNAS

By TELSA

TETRA PANEL X-POL ANTENNA

2x9.5 dBi, 90°

380 ÷ 430 MHz

T01221405

PMR

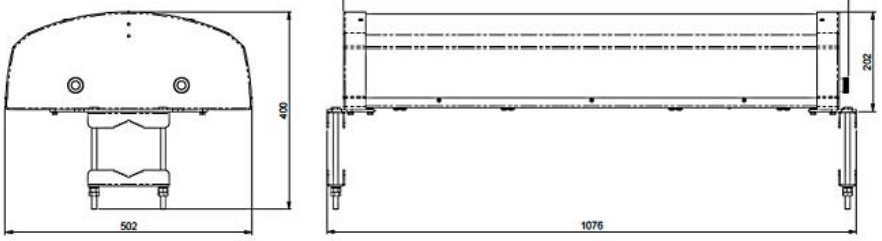
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	slant ±45°
HPBW (deg) Horizontal Plane	90 ± 3
HPBW (deg) Vertical Plane	35 ± 2
Gain (dBi)	2 × 9.5
Front to Back ratio (dB)	> 25
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		7/16" female
Dimensions (mm)		1000 × 500 × 200
Weight (Kg)		12
Wind Load (N) @ 150 Km/h	frontal	635
	lateral	275
	rearside	705
Colour		RAL 7035 Gray
Mounting		by clamps on pole Ø 50 ÷ 115 mm



Options

Mechanical downtilt (deg)	0 ÷ 10

PANEL ANTENNAS

By TELSA

TETRA PANEL X-POL ANTENNA

2x11 dBi, 65°

380 ÷ 430 MHz

T01221402

PMR

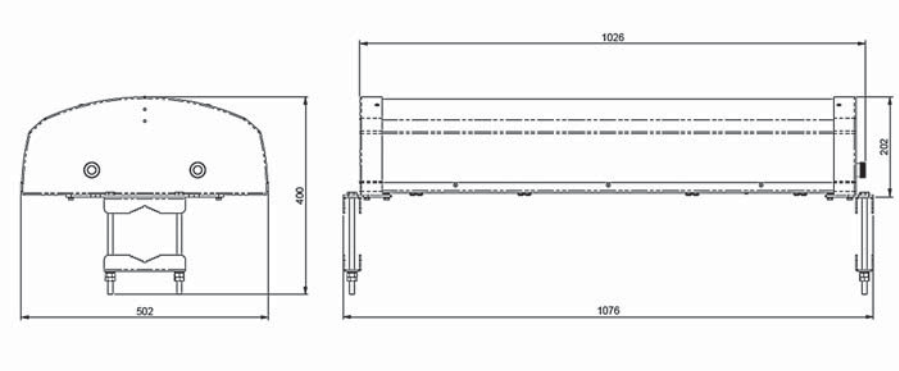
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	slant ±45°
HPBW (deg) Horizontal Plane	65 ± 3
HPBW (deg) Vertical Plane	36 ± 2
Gain (dBi)	2x11
Front to Back ratio (dB)	> 25
Isolation between ports (dB)	≥ 30
Continuous Max. Power (W)	500
Intermodulation IM3 (dBc) 2×43dBm carrier	≤ -150
Operating Temperature Range (°C)	-40 ÷ +70
Storage Temperature Range (°C)	-60 ÷ +80
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		2 × 7/16" female
Dimensions (mm)		1000 × 500 × 200
Weight (Kg)		13
Wind Load (N) @ 150 Km/h	frontal	635
	lateral	268
	rearside	705
Colour		Grey RAL 7035
Mounting		by clamps on pole Ø 40 ÷ 120 mm



Options

Mechanical downtilt (deg)	0 ÷ 15

PANEL ANTENNAS

By TELSA

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TETRA PANEL X-POL ANTENNA

2x13 dBi, 90°, 380 ÷ 430 MHz

T01241404

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

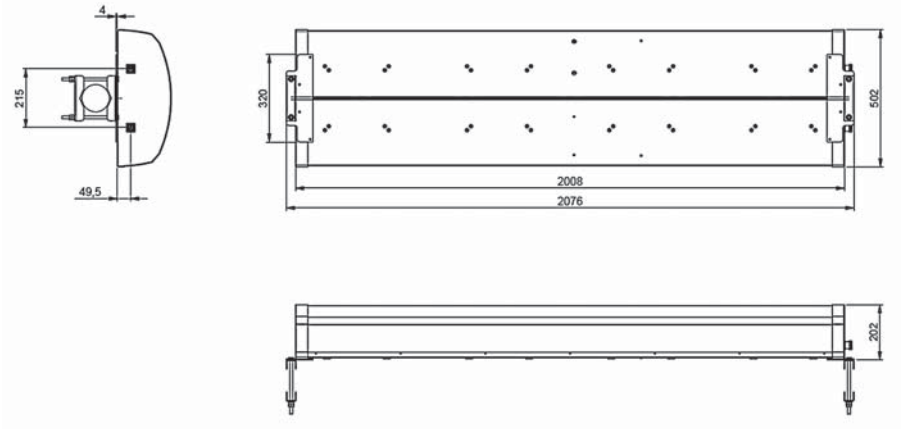
PANEL ANTENNAS

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	slant ±45°
HPBW (deg) Horizontal Plane	88
HPBW (deg) Vertical Plane	20
Gain (dBi)	2 × 13
Front to Back ratio (dB)	> 25
Isolation between channels (dB)	> 30
Intermodulation IM3 (dBc) 2×43 dBm carriers	≤ -150
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connector		2 × 7/16" female
Dimensions (mm)		2000 × 500 × 200
Weight (Kg)		20
Wind Load (N) @ 150 Km/h	frontal	1270
	lateral	536
	rearside	1410
Colour		Grey RAL 7035
Mounting		by clamps on pole Ø 40 ÷ 120 mm



Options

Mechanical downtilt (deg)	0 ÷ 15

By TELSA

TETRA PANEL X-POL ANTENNA

2x14 dBi, 65°

380 ÷ 430 MHz

T01241402

PMR

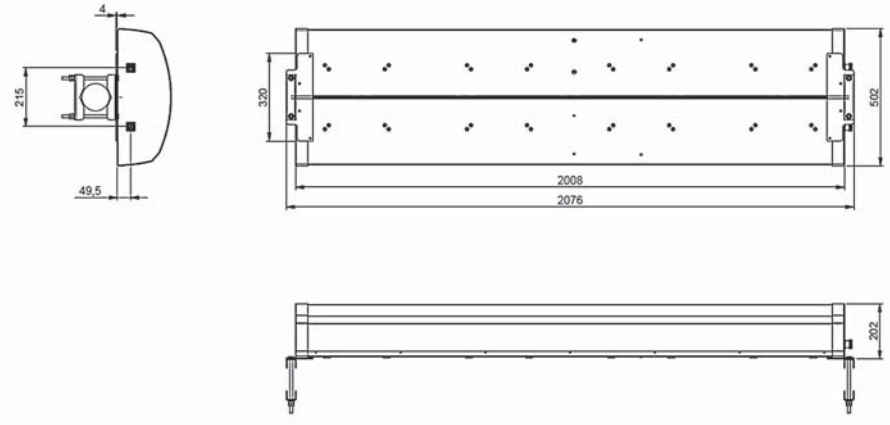
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
VSWR	≤ 1.5
Polarization	slant ±45°
HPBW (deg) Horizontal Plane	65 ± 3
HPBW (deg) Vertical Plane	18 ± 2
Gain (dBi)	≥ 14
Front to Back ratio (dB)	≥ 25
Isolation (dB)	≥ 30
Intermodulation 2×43dBm (dBc)	< -150
Continuous Max. Power (W)	500
Operating Temperature Range (°C)	-40 ÷ +70
Storage Temperature Range (°C)	-60 ÷ +80
Lightining Protection	DC grounded all metallic parts

Mechanical Specifications

Connectors		2 × 7/16" female
Dimensions (mm)		2000 × 500 × 200
Weight (Kg)		23
Wind Load (N) @ 150 Km/h	frontal	440
	lateral	227
	rearside	1029
Colour		Grey RAL 7035
Mounting		on pole Ø 40 ÷ 120 mm
Protection		IP55
Mechanical Downtilt 0÷15°		T16040004



Shipment Specifications

Packing	cardboard box
Dimensions (mm)	2140 × 590 × 285
Packed Antenna Weight (Kg)	~ 25

PANEL ANTENNAS

By TELSA

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BAND PASS CAVITY FILTER
ADJUSTABLE LOOPS

66 ÷ 82 MHz

T05110202
T05110203

PMR

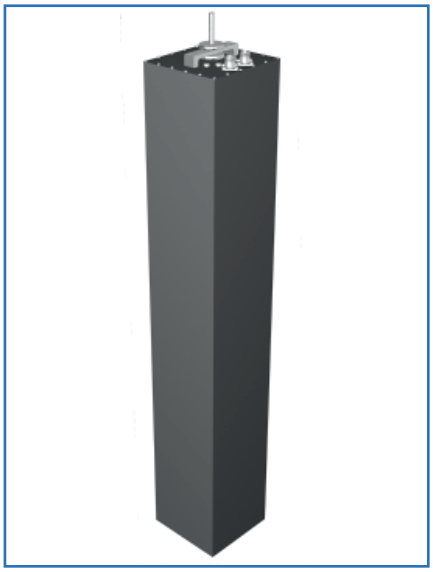
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	66 ÷ 82
Impedance (Ω)	50
VSWR	> 1.3
Max continuous power (W)	100
Op. Temp. Range (°C)	- 10 ÷ 55

Mechanical Specifications

Connectors	N f
Internal finishing	Silver plating
External body finishing	Black epoxy paint RAL 9005
Mounting system	T.B.D.



T05110203

Codes	A05110203	A05120202
N° of cavity	1 cavity	2 cavity
Insertion Loss (dB)	1	2
Selectivity @ f_0±0.5 MHz (dB) f_0 into mid band	14	28
Dimensions (mm)	150×150×1350	150×300×1350
Weight (Kg)	9	18

T05120202

By TELSA

NOTCH CAVITY FILTER

66 ÷ 82 MHz

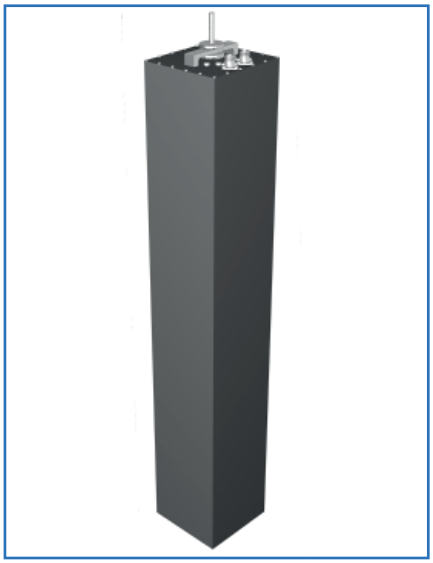
T05110203
T05110204

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications	
Frequency Band (MHz)	66 ÷ 82
Impedance (Ω)	50
Max continuous power (W)	500
Operating Temp. Range (°C)	-10 ÷ 55

Mechanical Specifications	
Connectors	N f
Colour	Black
Internal finishing	Silver plating
External body finishing	RAL 9005
External top cover finishing	Silver plating



T05110204

Codes	T05110204	T05120203
N° of cavities	1	2
Insertion Loss (dB)	< 0.5	< 0.5
Rejection @ f_0 ±1MHz (dB) f_0 into mid band	> 20	> 40
Dimensions (mm)	150×150×1350	150×300×1350
Weight (Kg)	9	18

T05120203

By TELSA

VHF SINGLE CAVITY FILTER

150 mm section

T05110418

PMR

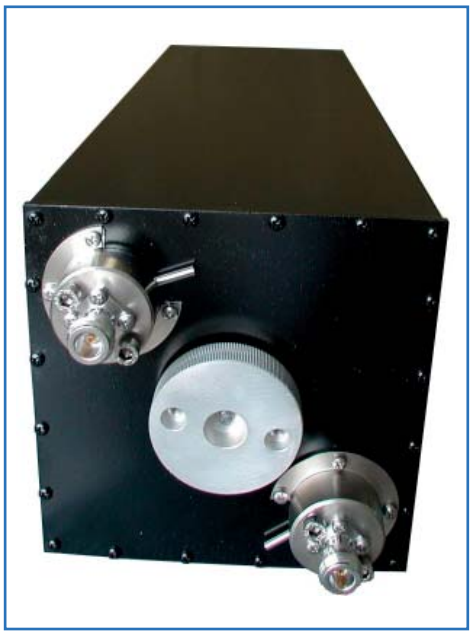
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)		147 ÷ 174
Impedance (Ω)		50
Insertion Loss (dB) with adjustable loop		0.5 ÷ 2
Return Loss (dB) with Insertion Loss of 1 dB		≥ 18
Attenuation @ (dB) with Insertion Loss of 1 dB	f_0 ± 0.5 %	≥ 13
	f_0 ± 1 %	≥ 19
Max continuous power (W)		100
Op. Temp.Range (°C)		-10 ÷ 55
Storage Temperature Range (°C)		- 30 ÷ 70
Max Continuous Power (W)		200

Mechanical Specifications

Connector	N f
Dimensions (mm)	150 × 150 × 525
Weight (Kg)	5



By TELSA

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VHF DUAL CAVITY BAND PASS FILTER

150 mm section

T05120409

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	147 ÷ 174
Impedance (Ω)	50
Insertion Loss (dB)	≤ 2
Return Loss (dB)	> 15
Attenuation (dB) @ 0.5% mid band	> 35
Max Continuous Power (W)	100
Op. Temp. Range	- 10 ÷ 55

Mechanical Specifications

Connectors	N f
Wieght (Kg)	21.5
External finishing	RAL 9005 black
Panel colour	RAL 9005 black
Tuning control	by external mechanism
Dimensions	5U × 19" × 663

By TELSA

VHF BAND PASS FILTER

144 ÷ 156 MHz

T05140501

PMR

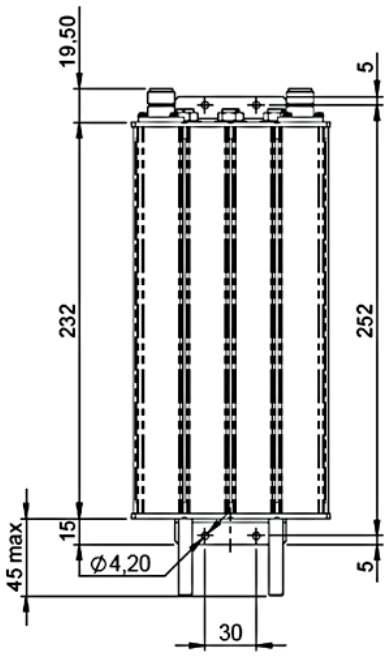
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

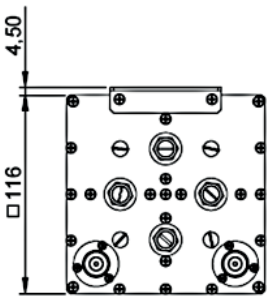
Electrical Specifications

Frequency Band (MHz)		144 ÷ 156
Bandwidth (KHz)		≥ 500
Impedance (Ω)		50
Insertion Loss (dB)		≤ 1.8
Return Loss (dB)	typical	≥ 20
	into Operating Temp. Range	≥ 15
Rejection (dB) @ f_0±6.5MHz		> 65
Op. Temp. Range (°C)		-30 ÷ 60

Mechanical Specifications

RF Connectors	N f
Dimensions (mm) filter body	232 × 116 × 116
Weight (Kg)	3.1
Outside finishing	Black RAL9005
Fixing	4 × Ø4.20mm holes





By TELSA

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UHF CAVITY BAND PASS FILTER

400 ÷ 512 MHz

T05120601

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	400 ÷ 512
Impedance (Ω)	50
Return Loss (dB) with Insertion Loss ≤ 2 dB	> 18
Max Continuous Power (W)	100
Op. Temp. Range	-10 ÷ 55

Mechanical Specifications

Connectors	Nf
External finishing	RAL 9005 black
Panel colour	RAL 9005 black
Tuning control	by internal mechanism

Nr of Cavity	Code	Insertion loss (dB)	Selectivity $f_0 \pm 0.5\%$	Dimensions (mm)	Weight (Kg)
1	T05120601	1	14	150x150x350	4
2	T05110601	2	28	150x300x350	8

By TELSA

VHF BAND PASS FILTER

156 ÷ 174 MHz

T05140503

PMR

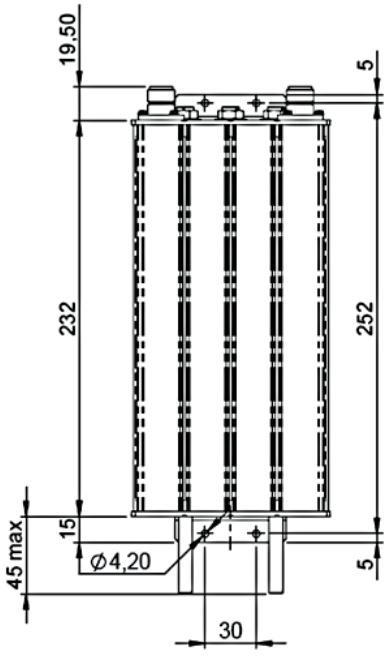
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

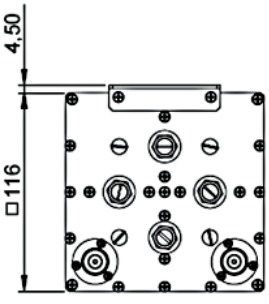
Electrical Specifications

Frequency Band (MHz)		156 ÷ 174
Bandwidth (KHz)		≥ 500
Impedance (Ω)		50
Insertion Loss (dB)		≤ 1.8
Return Loss (dB)	typical	≥ 20
	into Operating Temp. Range	≥ 15
Rejection (dB) @ f_0±6.5MHz 156÷165 MHz		> 65
Rejection (dB) @ f_0±8MHz 165÷174 MHz		>58
Operating Temperature Range (°C)		-30 ÷ +60

Mechanical Specifications

RF Connectors	N f
Dimensions (mm) filter body	232 × 116 × 116
Weight (Kg)	3.1
Outside finishing	Black RAL9005
Fixing	4 × Ø4.20mm holes





By TELSA

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UHF BAND PASS FILTER

380 ÷ 420 MHz

T05140701

PMR

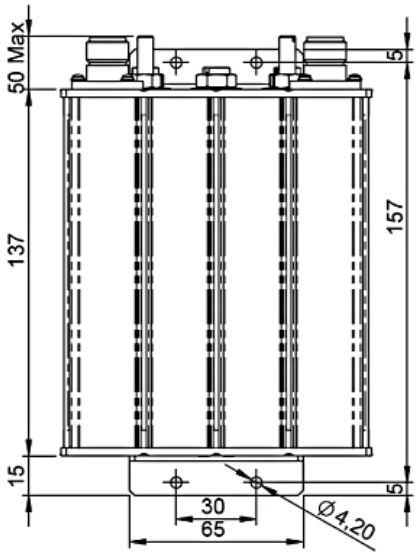
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

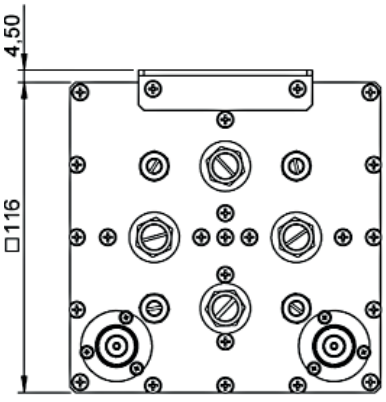
Electrical Specifications

Frequency Band (MHz)		380 ÷ 420
Bandwidth (KHz)		≥ 500
Impedance (Ω)		50
Insertion Loss (dB)		≤ 1.8
Return Loss (dB)	typical	≥ 20
	into Operating Temp. Range	≥ 17.5
Rejection (dB) @ f_0±5MHz		> 60
Op. Temp. Range (°C)		-30 ÷ 60

Mechanical Specifications

RF Connectors	N f
Dimensions (mm) filter body	137 × 116 × 116
Weight (Kg)	1.4
Outside finishing	Black RAL9005
Fixing	4 × Ø4.20mm holes





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UHF BAND PASS FILTER

420 ÷ 520 MHz

T05140703

PMR

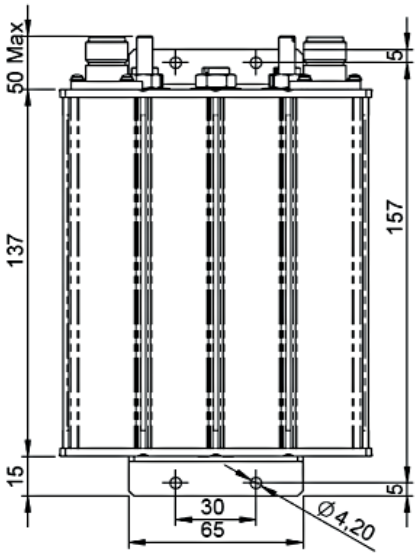
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

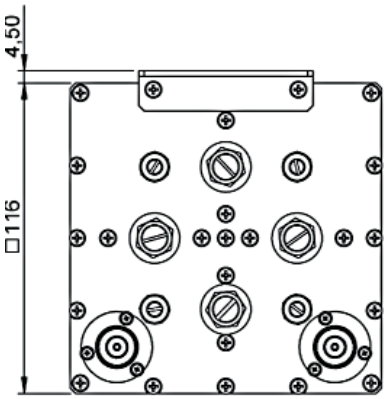
Electrical Specifications

Frequency Band (MHz)		420 ÷ 520
Bandwidth (KHz)		≥ 500
Impedance (Ω)		50
Insertion Loss (dB)		≤ 1.8
Return Loss (dB)	typical	≥ 20
	into Operating Temp. Range	≥ 17.5
Rejection (dB) @ f_0±5MHz		> 60
Op. Temp. Range (°C)		-30 ÷ 60

Mechanical Specifications

RF Connectors	N f
Dimensions (mm) filter body	137 × 116 × 116
Weight (Kg)	1.4
Outside finishing	Black RAL9005
Fixing	4 × Ø4.20mm holes





By TELSA

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RX FILTER FOR TETRA

380 ÷ 385 MHz

T05161401

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)		380 ÷ 385
Impedance (Ω)		50
Bandwidth (MHz)		5
Guard Band (MHz)		5
Frequency spacing (MHz)		10
Insertion Loss (dB)	@ ambient temperature	< 1.4
	@ operating temperature	< 1.7
Return Loss (dB)		> 17.5
RX attenuation (dB) @ TX frequencies		≥ 70
Out of band attenuation (dB)	65÷80 MHz	≥ 80
	145÷175 MHz	≥ 80
	530÷4000 MHz	≥ 30
Coupling (dB) of the directional coupler		35 ± 3
VSWR of the directional coupler		1.2
Continuous input power (dBm)		40
Environmental conditions		ETS 300-019-1-0
Safety		EN 60950
EMC standard compliance		ETSI EN 301-489-18
Operating Temp. Range (°C)		-10 ÷ 70

Mechanical Specifications

Connectors	Antenna	N f
	RX	SMA f
	Coupled Line	SMA f
Dimensions (mm)		233 x 210 × 40
Weight (Kg)		1.76
Transportation		ETS 300-019-1-2 class 2.2
Storage		ETS 300-019-1-1 class 1.2
In use stactionary weather protected		ETS 300-019-1-3 class 3.2

By TELSA

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PASS REJECT DUPLEXER

66 ÷ 88 MHz

T06210215

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	66 ÷ 88
Impedance (Ω)	50
VSWR @ f_0, all ports	> 1.3
Insertion Loss (dB)	< 1.2
Isolation (dB) between channels	> 80
Channel Spacing (MHz)	1
Continuous Power Input (W)	100
Op. Temp. Range (°C)	-30 ÷ +60

Mechanical Specifications

RF Connectors	N f
Dimensions (mm)	300 × 300 × 1400
Weight (Kg)	35

ACCESSORIES (FILTERS - DUPLEXERS)

By TELSA

SIX-RESONATOR PASS REJECT DUPLEXER

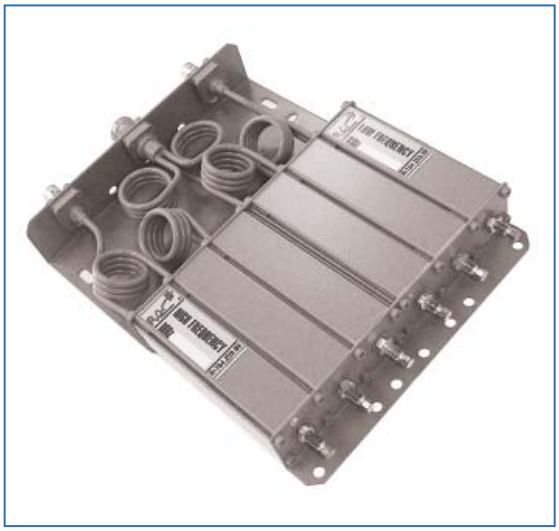
144 ÷ 164 MHz

R-6X 145 G

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	144 ÷ 164
Impedance (Ω)	50
V.S.W.R.	<1.4
Maximum rated RF power (W)	100
Tx-Rx insertion loss (dB)	<1.2
Tx-Rx isolation (dB)	>80
Frequency stability (ppm/C°)	4.5
Type of connection	BNC female (Tx-RX)
	N female (antenna)
Cavity material	Aluminium alloy DIN 3.2306
Treatment (Chemical conversion coating)	MIL-C-5541 with grey varnish RAL7001
Elements material	Brass passivated
Dimensions (mm)	33 x 157 x 212
Net weight (g)	1100 g
Working Temperature (°C)	-35 ÷ +80



By RAC

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SIX-RESONATOR PASS REJECT DUPLEXER

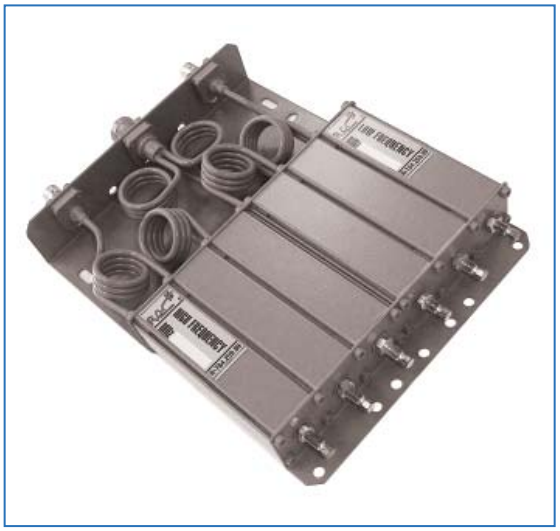
154 ÷ 174 MHz

R-6X 145 H

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	154 ÷ 174
Impedance (Ω)	50
V.S.W.R.	<1.4
Maximum rated RF power (W)	100
Tx-Rx insertion loss (dB)	<1.2
Tx-Rx isolation (dB)	>80
Frequency stability (ppm/C°)	4.5
Type of connection	BNC female (Tx-RX)
	N female (antenna)
Cavity material	Aluminium alloy DIN 3.2306
Treatment (Chemical conversion coating)	MIL-C-5541 with grey varnish RAL7001
Elements material	Brass passivated
Dimensions (mm)	33 x 157 x 212
Net weight (g)	1100 g
Working Temperature (°C)	-35 ÷ +80



By RAC

SIX-RESONATOR PASS REJECT DUPLEXER

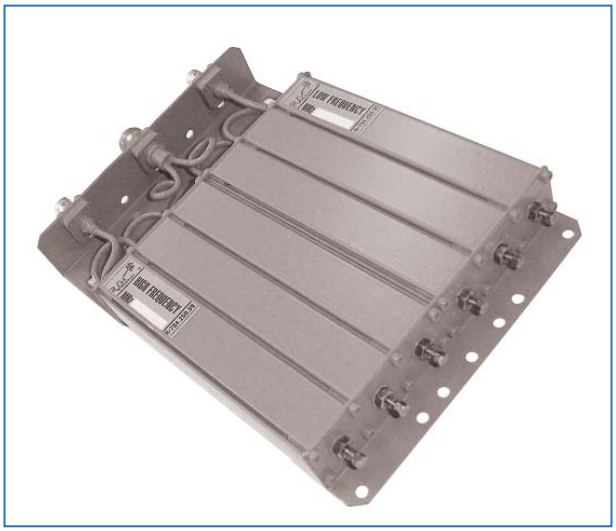
380 ÷ 430 MHz

R-6X 110 Q

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
V.S.W.R.	<1.4
Maximum rated RF power (W)	100
Tx-Rx insertion loss (dB)	<1.2
Tx-Rx isolation (dB)	>85
Frequency stability (ppm/C°)	4.5
Type of connection	BNC female (Tx-RX)
	N female (antenna)
Cavity material	Aluminium alloy DIN 3.2306
Treatment (Chemical conversion coating)	MIL-C-5541 with grey varnish RAL7001
Elements material	Brass passivated
Dimensions (mm)	33 x 157 x 247
Net weight (g)	1350 g
Working Temperature (°C)	-35 ÷ +80



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SIX-RESONATOR PASS REJECT DUPLEXER

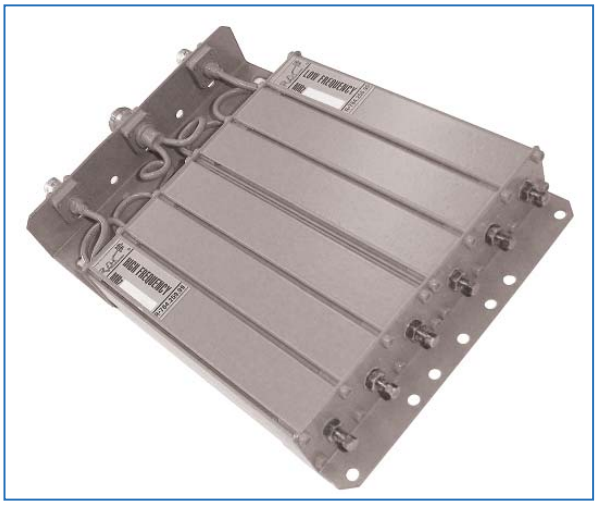
420 ÷ 470 MHz

R-6X 110 Z

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	420 ÷ 470
Impedance (Ω)	50
V.S.W.R.	<1.4
Maximum rated RF power (W)	100
Tx-Rx insertion loss (dB)	<1.2
Tx-Rx isolation (dB)	>85
Frequency stability (ppm/C°)	4.5
Type of connection	BNC female (Tx-RX)
	N female (antenna)
Cavity material	Aluminium alloy DIN 3.2306
Treatment (Chemical conversion coating)	MIL-C-5541 with grey varnish RAL7001
Elements material	Brass passivated
Dimensions (mm)	33 x 157 x 230
Net weight (g)	1350 g
Working Temperature (°C)	-35 ÷ +80



By RAC

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4 CHANNELS UHF HYBRID COMBINER

400 ÷ 520 MHz

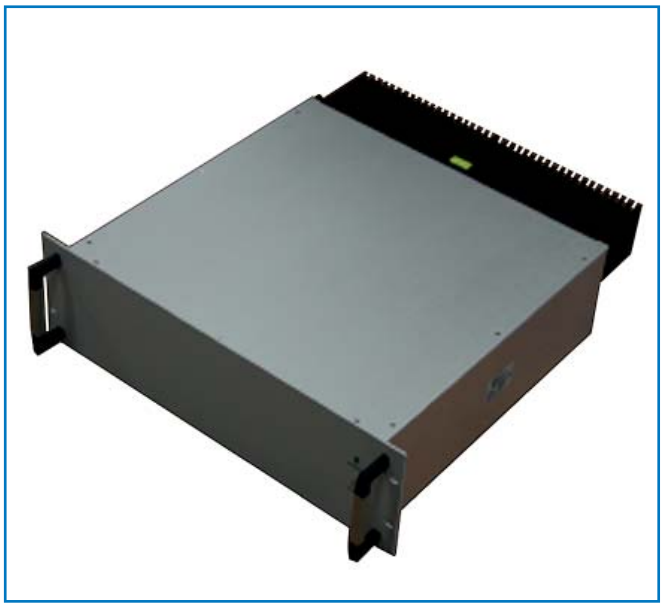
T06030605

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	400 ÷ 520
Impedance (Ω)	50
Insertion loss	≤ 7.5
VSWR	< 1.5
Isolation (dB) channel to channel	> 35
Max continuous Input Power (W) all ports simultaneously	50
Op. Temp. Range (°C)	- 20 ÷ 55
Electrical Safety	EN 60950 EN 60215
EMI / EMC	ETSI EN 301 489-1 /-18



Mechanical Specifications

RF Connectors	N f
Dimensions	3U × 19" × 520mm
Weight (Kg)	12.5
Front Panel Colour	RAL 7047
Relative Humidity	< 95% @ 40°C not condensing
Vibration	IEC 60068-2-6 0.3mm double amplitude 2g, 10 ÷ 55 Hz 1 octave / min total test period 30min
Shock	IEC 60068-2-27 30g for 11ms 18 shocks in 3 positions
MTBF (hours)	≥ 1000000

By TELSA

4 CHANNELS VHF HYBRID COMBINER

144 ÷ 174 MHz

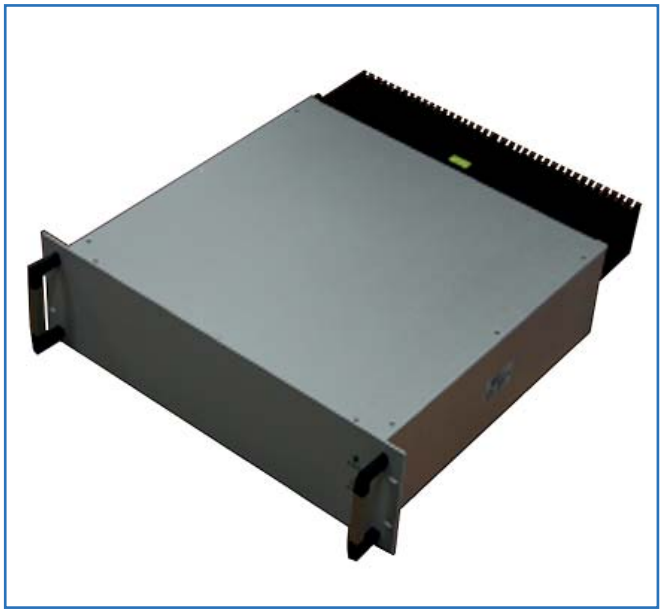
T06030410

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	144 ÷ 174
Impedance (Ω)	50
Insertion loss	≤ 8
VSWR	< 1.5
Isolation (dB) channel to channel	> 35
Max continuous Input Power (W) all ports simultaneously	50
Op. Temp. Range (°C)	- 20 ÷ 55
Electrical Safety	EN 60950 EN 60215
EMI / EMC	ETSI EN 301 489-1 /-18



Mechanical Specifications

RF Connectors	N f
Dimensions	3U × 19" × 520mm
Weight (Kg)	14
Front Panel Colour	RAL 7047
Relative Humidity	< 95% @ 40°C not condensing
Vibration	IEC 60068-2-6 0.3mm double amplitude 2g, 10 ÷ 55 Hz 1 octave / min total test period 30min
Shock	IEC 60068-2-27 30g for 11ms 18 shocks in 3 positions
MTBF (hours)	≥ 1000000

By TELSA

2 CHANNELS UHF HYBRID COMBINER

400 ÷ 520 MHz

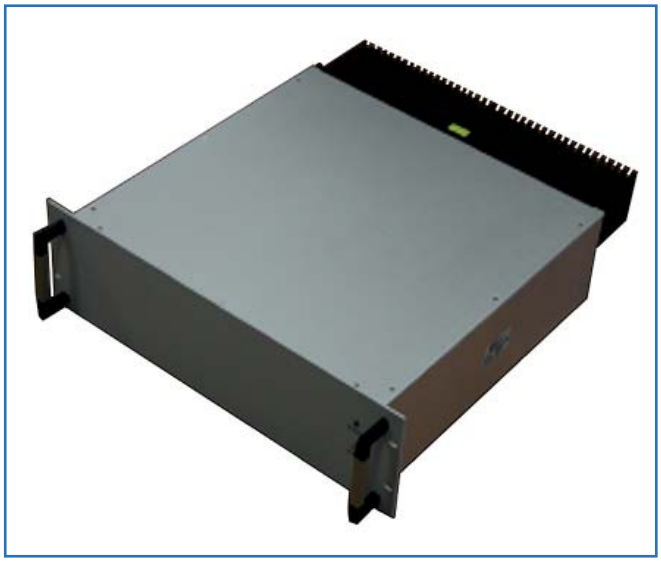
T06010605

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)		**400 ÷ 520**
Impedance (Ω)		**50**
Insertion Loss (dB)		**≤ 5**
VSWR		**< 1.5**
Isolation (dB) channel to channel with	**VSWR=1**	**≥ 65**
	VSWR=2	**≥ 55**
Reverse Isolation (dB)		**≥ 40**
Power per Input (W)		**50**
Op. Temp. Range (°C)		**-20 ÷ 55**
Electrical Safety		**EN 60950 EN 60215**
EMI / EMC		**ETSI EN 301 489-1 /-18**



Mechanical Specifications

RF Connectors	N f
Dimensions	3U × 19" × 520mm
Weight (Kg)	10.5
Front Panel Colour	RAL 7047
Relative Humidity	< 95% @ 40°C not condensing
Vibration	IEC 60068-2-6 0.3mm double amplitude 2g, 10 ÷ 55 Hz 1 octave / min total test period 30min
Shock	IEC 60068-2-27 30g for 11ms 18 shocks in 3 positions
MTBF (hours)	≥ 440000
Enviromental Conditions	IP20

By TELSA

2 ÷ 8 CHANNELS TX VHF SINGLE CAVITY COMBINER

in Star Configuration with isolator

T06090411

PMR

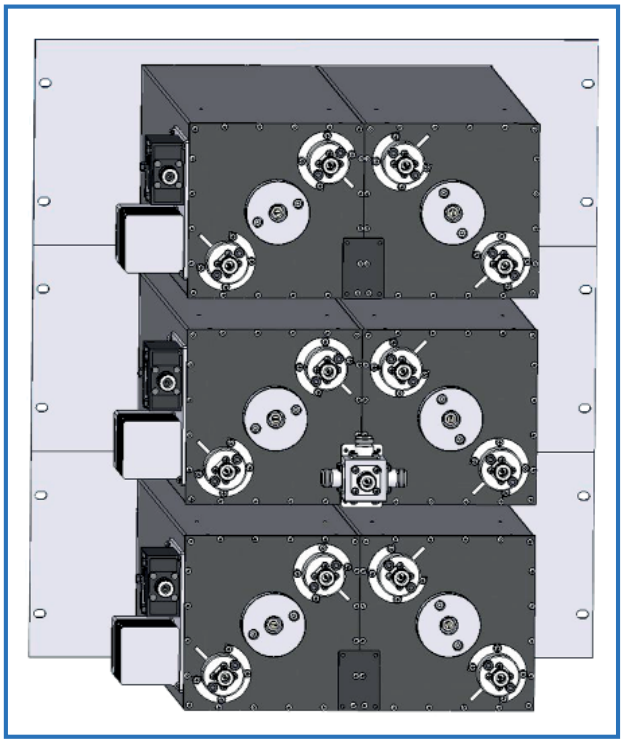
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	147 ÷ 174
Impedance (Ω)	50
Insertion Loss (dB)	< 2
Return Loss (dB) input & output	≥ 18
Isolation (dB) between channels with 0.5% separation	> 30
Max Continuous Power (W_{RMS})	50
Op. Temp. Range (°C)	-10 ÷ 55

Mechanical Specifications

RF Connector		N f
Dimensions	width	19"
	depth	550 mm
	height	Look at the table
Weight (Kg)		Look at the table
Panel Colour		RAL9005



Nr of Ch	Code	Nr of Frames	Height (U)	Weight (Kg)
2	**T06090411**	1	4	10.5
3	**T06100409**	2	8	16.5
4	**T06110409**	2	8	21
5	**T06120429**	3	12	27
6	**T06120430**	3	12	31.5
7	**T06120431**	4	16	37.5
8	**T06120405**	4	16	42

By TELSA

2 CHANNELS TETRA CAVITY COMBINER

380 ÷ 430 MHz

T06131405

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
Channel Spacing (KHz)	500
Return Loss (dB)	≥ 14
Max Continuous Power (W)	100
Insertion Loss (dB)	≤ 2
Isolation between channels (dB) with 500 KHz channel spacing	≥ 10
Storage Temperature (°C)	-40 ÷ +70
Umidity (no condensing)	5% ÷ 95%
Electrical Safety	IEC 60950-1 EN 60950-1
EMC	ETSI EN 301 489-1 489-22

Mechanical Specifications

RF Connector	N f
Dimensions	5U × 19" × 460mm
Weight (Kg)	10
Panel Colour	RAL7035
Operating Enviroment	ETS 300 019-1-2 ETS 300 019-2-3 Class 3.1E
with Extend Temperature Range	-10 ÷ +55
Transportation and Handling	ETS 300 019-2-2 Class 2.2

By TELSA

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4 CHANNELS TETRA CAVITY COMBINER

380 ÷ 430 MHz

T06131407

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications	
Frequency Band (MHz)	380 ÷ 430
Impedance (Ω)	50
Channel Spacing (KHz)	500
Return Loss (dB)	≥ 14
Max Continuous Power (W)	100
Insertion Loss (dB)	≤ 2.3
Isolation between channels (dB) with 500 KHz channel spacing	≥ 10
Storage Temp. Range (°C)	-40 ÷ 70
Umidity (no condensing)	5% ÷ 95%
Electrical Safety	IEC 60950-1 EN 60950-1
EMC	ETSI EN 301 489-1 490-22

Mechanical Specifications	
RF Connector	Nf
Dimensions (mm)	10U × 19" × 460mm
Weight (Kg) total	20
Panel Colour	RAL7035 (black)
Operating Enviroment	ETS 300 019-1-2 ETS 300 019-2-3 Class 3.1E
With Extend Temperature Range	-10 ÷ +55
Transportation and Handling	ETS 300 019-2-2 Class 2.2

By TELSA

VHF 3 dB HYBRID COUPLER

118 ÷ 170 MHz

T09210404

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	118 ÷ 170
Impedance (Ω)	50
Insertion Loss (dB)	≤ 3.3
Return Loss (dB) all ports	> 20
Isolation (dB)	≥ 25
Max Continuous Power (W)	100
Op. Temp. Range (°C)	-10 ÷ +50

Mechanical Specifications

Connector	4 x N f
Dimensions (mm)	302 × 65 × 52
Colour	RAL 9005 (black)
Weight (g)	832

DESCRIPTION:

Hybrid coupler is a passive device used with a few different applications. It is a type of directional coupler where the input power is equally divided between two output ports. It is designed for decoupled combining of two transmitters/receiver units with the same frequency range at 3dB loss, with frequency spacing as narrow as desired.
It can also work as a combiner component to combine two signals to a common port or to split an incoming signal equally to two output ports.

3dB couplers are used also in Telsa combiners in Double Bridge Configuration.
In terms of functioning, the 3dB coupler has four ports, with the first and last ones decoupled from each other. When power is entered from the first port, it is equally divided between the second and third ports. The fourth port, which theoretically should be decoupled and therefore without power, is normally terminated with an absorber properly dimensioned for the mismatch between the second and third ports.

By TELSA

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UHF 3 dB HYBRID COUPLER

406 ÷ 512 MHz

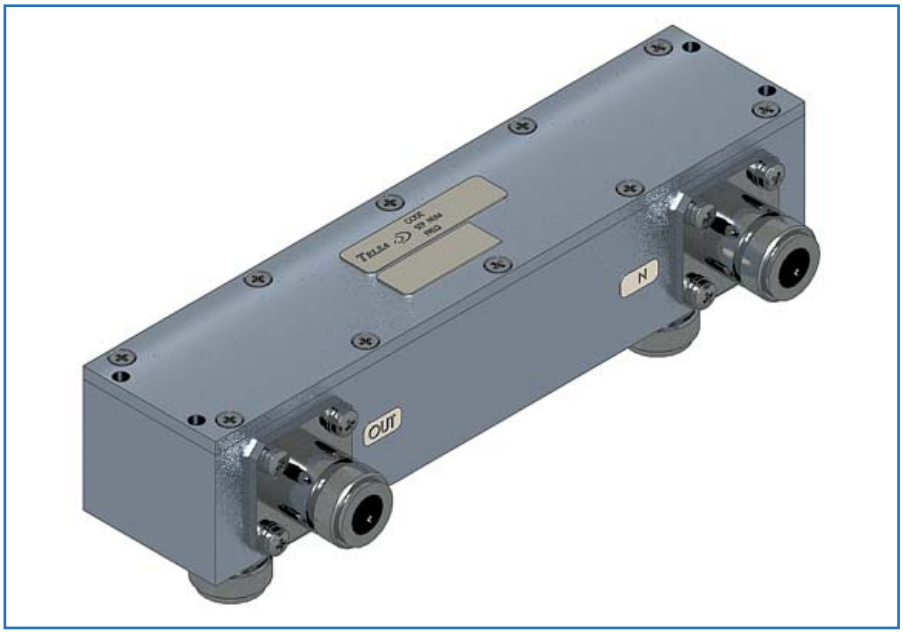
T09110701

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	406 ÷ 512
Impedance (Ω)	50
Temperature Range (°C)	-10 ÷ +50
Max Continuous Power (W)	100
Insertion Loss (dB)	≤ 3.25
Return Loss (dB) all ports	> 19
Isolation (dB)	≥ 25



Mechanical Specifications

Connectors	N f
Dimensions (mm)	156 × 35 × 33
Material	Anticorodal EN AW 6060
Surface Treatment	SURTEC 650 chromitAL TCP
Weight (g)	520

By TELSA

VHF 3 dB HYBRID COUPLER

66 ÷ 80 MHz

T09110202

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	66 ÷ 80
Impedance (Ω)	50
VSWR	≤ 1.2
Insertion Loss (dB)	≤ 3.4
Isolation (dB)	≥ 25
Continuous Max Power (W)	100
Op. Temp. Range (°C)	- 10 ÷ 50

Mechanical Specifications

Connector	Nf
Dimensions (mm)	650 × 35 × 53
Material	Aluminum
Weight (Kg)	1.6

By TELSA

TWO WAYS COUPLER FOR ARRAYS OF ANTENNAS

66 ÷ 88 MHz

R-2 Y10 NE

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	66 ÷ 88
Impedance (Ω)	50
V.S.W.R.	<1.2
V.S.W.R. (1 gate open)	<2
Maximum rated RF power (W)	1000
Insertion loss (dB)	0.1
Type of connection	N female
Hermetic seal	Pass helium leak test of 1x10-10 cc/sec
Inner conductor	Brass silver plated
Housing material	Aluminiun alloy DIN 3.3206
Net weight (g)	620
Dimensions (mm)	25 x 50 x 430
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

This coupler finds its specific application in arrays of Yagi antennas.

High perfromances and professional equipment.

By RAC

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TWO WAYS COUPLER FOR ARRAYS OF ANTENNAS

135 ÷ 180 MHz

R-2 Y10 NH

PMR

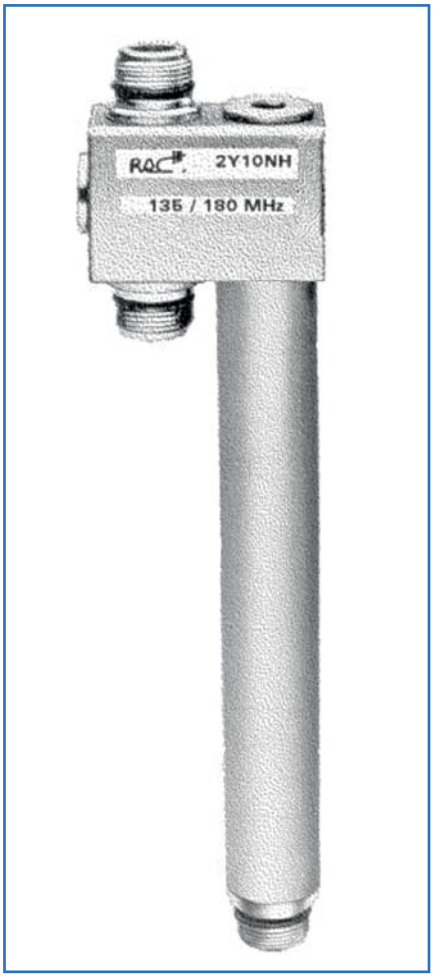
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	135 ÷ 180
Impedance (Ω)	50
V.S.W.R.	<1.2
V.S.W.R. (1 gate open)	<2
Maximum rated RF power (W)	1000
Insertion loss (dB)	0.1
Type of connection	N female
Hermetic seal	Pass helium leak test of 1x10-10 cc/sec
Inner conductor	Brass silver plated
Housing material	Aluminiun alloy DIN 3.3206
Net weight (g)	310
Dimensions (mm)	25 x 50 x 245
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

This coupler finds its specific application in arrays of Yagi antennas.

High perfromances and professional equipment.



By RAC

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FOUR WAYS COUPLER FOR ARRAYS OF ANTENNAS

152 ÷ 174 MHz

R-4 Y10 NH

PMR

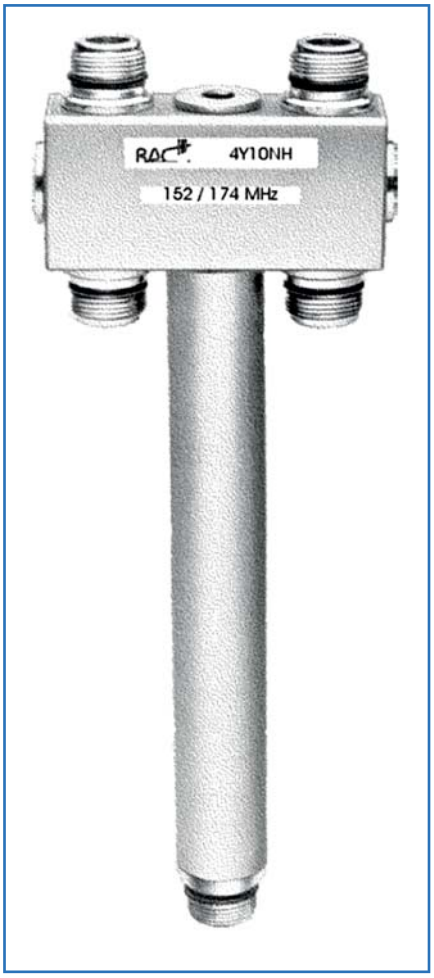
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	152 ÷ 174
Impedance (Ω)	50
V.S.W.R.	<1.2
V.S.W.R. (1 gate open)	<2
Maximum rated RF power (W)	1000
Insertion loss (dB)	0.1
Type of connection	N female
Hermetic seal	Pass helium leak test of 1x10-10 cc/sec
Inner conductor	Brass silver plated
Housing material	Aluminiun alloy DIN 3.3206
Net weight (g)	400
Dimensions (mm)	25 x 72 x 210
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

This coupler finds its specific application in arrays of Yagi antennas.

High perfromances and professional equipment.



By RAC

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TWO WAYS COUPLER FOR ARRAYS OF ANTENNAS

400 ÷ 520 MHz

R-2 Y10 NZ

PMR

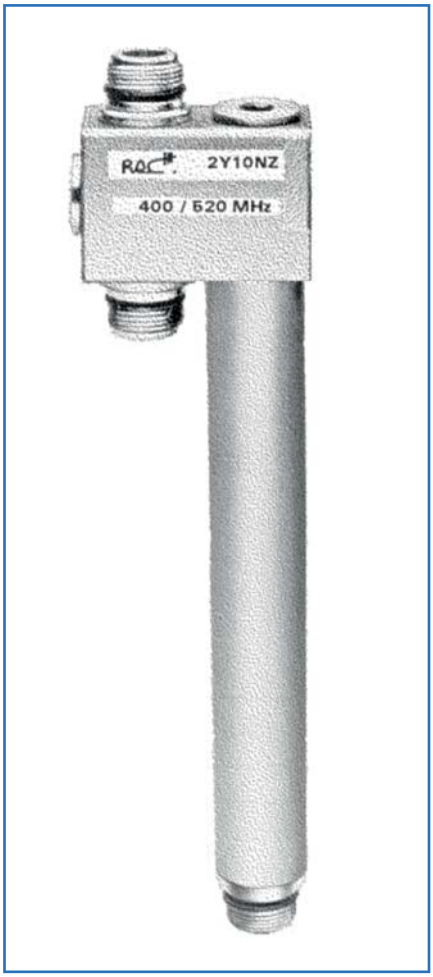
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	400 ÷ 520
Impedance (Ω)	50
V.S.W.R.	<1.2
V.S.W.R. (1 gate open)	<2
Maximum rated RF power (W)	1000
Insertion loss (dB)	0.1
Type of connection	N female
Hermetic seal	Pass helium leak test of 1x10-10 cc/sec
Inner conductor	Brass silver plated
Housing material	Aluminiun alloy DIN 3.3206
Net weight (g)	230
Dimensions (mm)	25 x 50 x 135
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

This coupler finds its specific application in arrays of Yagi antennas.

High perfromances and professional equipment.



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FOUR WAYS COUPLER FOR ARRAYS OF ANTENNAS

415 ÷ 470 MHz

R-4 Y10 NZ

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Main Characteristics	
Frequency Band (MHz)	415 ÷ 470
Impedance (Ω)	50
V.S.W.R.	<1.2
V.S.W.R. (1 gate open)	<2
Maximum rated RF power (W)	1000
Insertion loss (dB)	0.1
Type of connection	N female
Hermetic seal	Pass helium leak test of 1x10-10 cc/sec
Inner conductor	Brass silver plated
Housing material	Aluminiun alloy DIN 3.3206
Net weight (g)	300
Dimensions (mm)	25 x 72 x 175
Working Temperature (°C)	-35 ÷ +80

DESCRIPTION:

This coupler finds its specific application in arrays of Yagi antennas.

High perfromances and professional equipment.

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RF SPLITTER 2 WAYS

380 ÷ 512 MHz

T07311402

PMR

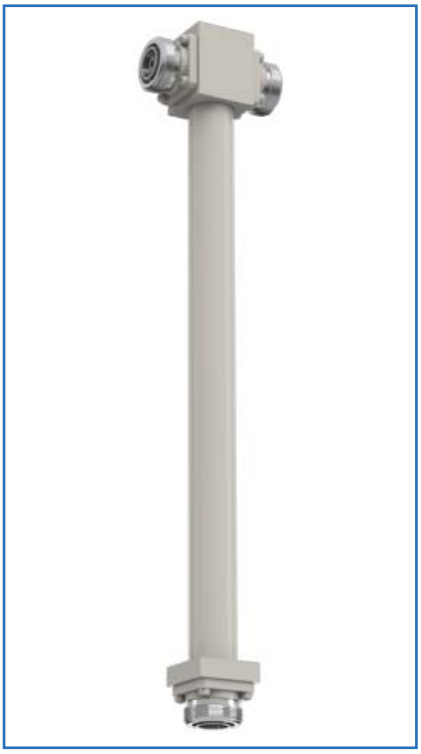
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 512
Impedance (Ω)	50
V.S.W.R	≤ 1.1:1
Continuous Max. Power (W)	1000
Op. Temp. Range (°C)	-10 ÷ +55
Insertion loss (dB)	< 0.005
Isolation (dB)	> 20

Mechanical Specifications

Connectors	3 x 7/16
Dimensions (mm)	387 x ø 25
Weight (Kg)	1.3



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RF SPLITTER 3 WAYS

380 ÷ 512 MHz

T07321402

PMR

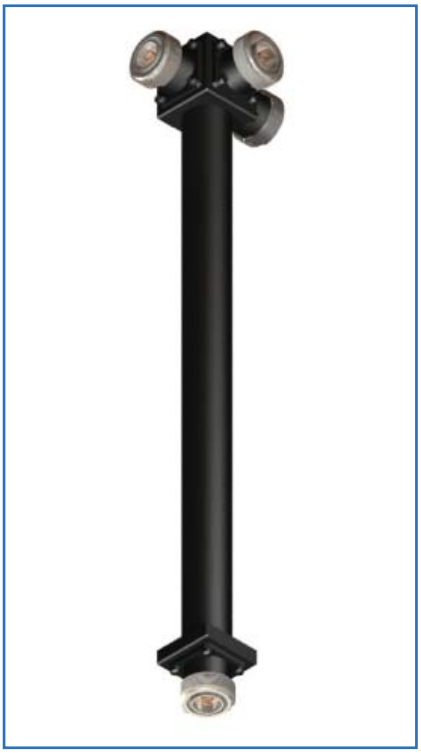
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	380 ÷ 512
Impedance (Ω)	50
V.S.W.R	≤ 1.1:1
Continuous Max. Power (W)	1000
Op. Temp. Range (°C)	-10 ÷ +55
Insertion loss (dB)	< 0.005
Isolation (dB)	> 20

Mechanical Specifications

Connectors	4 x 7/16
Dimensions (mm)	410 x ø 28
Weight (Kg)	1.3



VHF RECEIVER MULTICOUPLER 8 WAYS

147 ÷ 174 MHz

T13060401

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications	
Frequency Band (MHz)	147 ÷ 174
Impedance (Ω)	50
Nr. of outputs	8
Nr. of antenna ports	1
Nr. of power supply ports	2
Return Loss (all ports) (dB)	≥ 15
Noise figure (dB)	≤ 4
Gain (dB)	2 ± 1.5
Isolation (dB) between any 2 outputs	≥ 20
IP 3rd order (dBm)	≥ +25
Band rejection @10MHz (dB)	≥ 25
Power supply (V_{DC})	21.6 ÷ 31.2
Op. Temp. Range (°C)	-20 ÷ 50
Storage Temp. Range (°C)	40 ÷ 70
Op. Humidity Range (°C)	5% ÷ 90%
Storage Humidity Range (°C)	100%
Protection	IP 20

Mechanical Specifications	
Connectors	N f
Dimensions (mm)	19" x 1U x 385
Weight (Kg)	3.4

DESCRIPTION:

This receiver multicoupler allows to connect up to 8 channels to one 147-174 MHz VHF band.
The low noise figure [< 4 dB] and excellent intermodulation properties guarantee a high dynamic range and thereby enhanced receiving conditions.
This is particularly significant in locations where transmitters are operated nearby.
Unused output ports should always be terminated with 50 Ohm loads to preserve gain flatness and specified inter-port isolation.

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DUPLEXER FOR TETRA

380 ÷ 395 MHz and 385 ÷ 400 MHz

T06211481

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	**T06211481**	RX	380÷385
		TX	390÷395
	T06211489	RX	385÷390
		TX	395÷400
Impedance (Ω)			50
Bandwidth (MHz)			5
Guard Band (MHz)			5
Frequency Spacing (MHz)			10
Insertion Loss (dB) @ room temperature			≤ 1.3
Return Loss (dB)			> 18
TX Attenuation (dB) @ RX frequencies			≥ 80
RX Attenuation (dB) @ TX frequencies			≥ 80
Out of Band Attenuation (dB) into band	65 ÷ 80 MHz		≥ 80
	145 ÷ 175 MHz		≥ 80
	530 ÷ 4000 MHz		≥ 30
IP3 (dBm) with 2 × 50 W carriers			≥ 93
Continuous Input Power (dBm)			≥ 53
Operating Temp. Range (°C)			-10 ÷ +70
Enviromental Conditions			ETS 300-019-1-0
Safety			EN60950
EMC standard compliance			ETSI EN 301 489-18

Mechanical Specifications

Antenna connector	N f
TX connector	N f
RX connector	SMA f
Dimensions (mm)	246 × 217 × 129
Weight (Kg)	5.9
Front panle colour	uncolour anodized
Transportation	ETS 300-019-1-2 class 2.2
Storage	ETS 300-019-1-1 class 1.2
In use stactionary weather protected	ETS 300-019-1-3 class 3.2

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UHF 3 dB DUPLEXER

400 ÷ 470 MHz

T06211801

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	400÷470
Frequency Spacing (MHz)	4.6
Impedance (Ω)	50
Insertion Loss @ f_0 (dB)	< 1.5
Return Loss @ f_0 (dB)	> 15
Isolation TX/RX (dB)	> 70
Isolation RX/TX (dB)	> 70
Operating Temp. Range (°C)	-10 ÷ 55
Max Continuous Power (W)	50

Mechanical Specifications

Connectors	Nf
Dimensions (mm)	150 × 234 × 43
Colour	RAL 9005 (black)
Weight (Kg)	1.5
Material	Alluminium

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DUPLEXER

430 ÷ 470 MHz

T06210706

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	430 ÷ 470
Impedance (Ω)	50
Insertion Loss (dB)	≤ 2
Tx/Rx Isolation (dB)	≥ 73
Return Loss (dB)	≥ 19
Bandwidth (MHz)	3
Rx /Tx Distance (MHz)	> 9.5
Out-Band Attenuation up to 2.8 GHz (dB)	> 40
Max Continuous Power (W)	100
Operating Temperature Range (°C)	-10 ÷ +60

Mechanical Specifications

Dimensions (mm)	197 × 95 × 120
Antenna connector	N f
Rx / Tx connectors	BNC f 90°
Material	Alluminium Alloy
Finishing	Silver Plated
Weight (Kg)	2.8

RF LOAD 30W

0 ÷ 1 GHz

T10140101

PMR

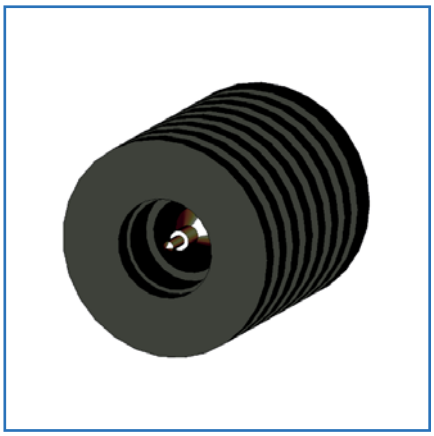
TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)	0 ÷ 1000
Impedance (Ω)	50
VSWR	1 ÷ 1.15

Mechanical Specifications

RF Connector	Nm
Dimensions (mm)	Ø 35 × 38
Weight (g)	70
Colour	Black



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50Ω DUMMY LOADS

T101XXXXX

PMR

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Our products can be tailored according to the customer's need.

50W Dummy Load	
Description	Code
Connector Nf	T10130204
Connector Nm	T10130207
Dimensions (mm)	90x50x50
VSWR [0÷1GHz]	1 : 1.15
VSWR [1÷2GHz]	1 : 1.25

100W Dummy Load	
Description	Code
Connector Nf	T10130205
Connector Nm	T10130206
Dimensions (mm)	147x70x70
VSWR [0÷1GHz]	1 : 1.15
VSWR [1÷2GHz]	1 : 1.25

VSWR METER

100 ÷ 500 MHz

T11631406

PMR

TEDAP offers a very wide range of wireless products.
Our products can be tailored according to the customer's need.

Electrical Specifications

Frequency Band (MHz)		100 ÷ 500
Impedance (Ω)		50
VSWR		min 1.05 max 1.25 typ. 1.1
Insertion Loss (dB)		≤ 0.1
Input Continuous Max Power (W)		250
Min. Power detected (mW)		500
Power Supply (V_{DC})		20 ÷ 40
Alarm Conditions	alarm on	≤ 1 V_{DC}
	alarm off	Power Supply
	adjustable threshold	VSWR = 2÷3.5 ±25%
	Factory VSWR threshold	2.3 ±25%
Op. Temp. Range (°C)		-10 ÷ 70

Mechanical Specifications

Dimensions (mm)	110 × 28 × 70
Colour	RAL9005 (black)
Fixing Holes	4 × M2.5
Dimensions (mm)	Ø 35 × 38
Weight (g)	410
RF Connector	N f

Power Supply and Alarm Connector pin-out D-sub 9 poles f	
1	alarm output (active low)
3, 4	power supply
2, 7, 8	not connected
5, 6, 9	ground

4 pins male connector for LEDs 2.54mm Tyco AMPMODU	
1	ALARM LED + (A)
2	ALARM LED - (K)
3	POWER LED - (K)
4	POWER LED + (A)

DESCRIPTION:

The VSWR Meter is used to detect any possible malfunctioning in the device, typically an antenna, to which it is connected.

It measures VSWR value and sends an alarm when the latter exceeds a certain user defined threshold [adjustable from 1.5 to 4].

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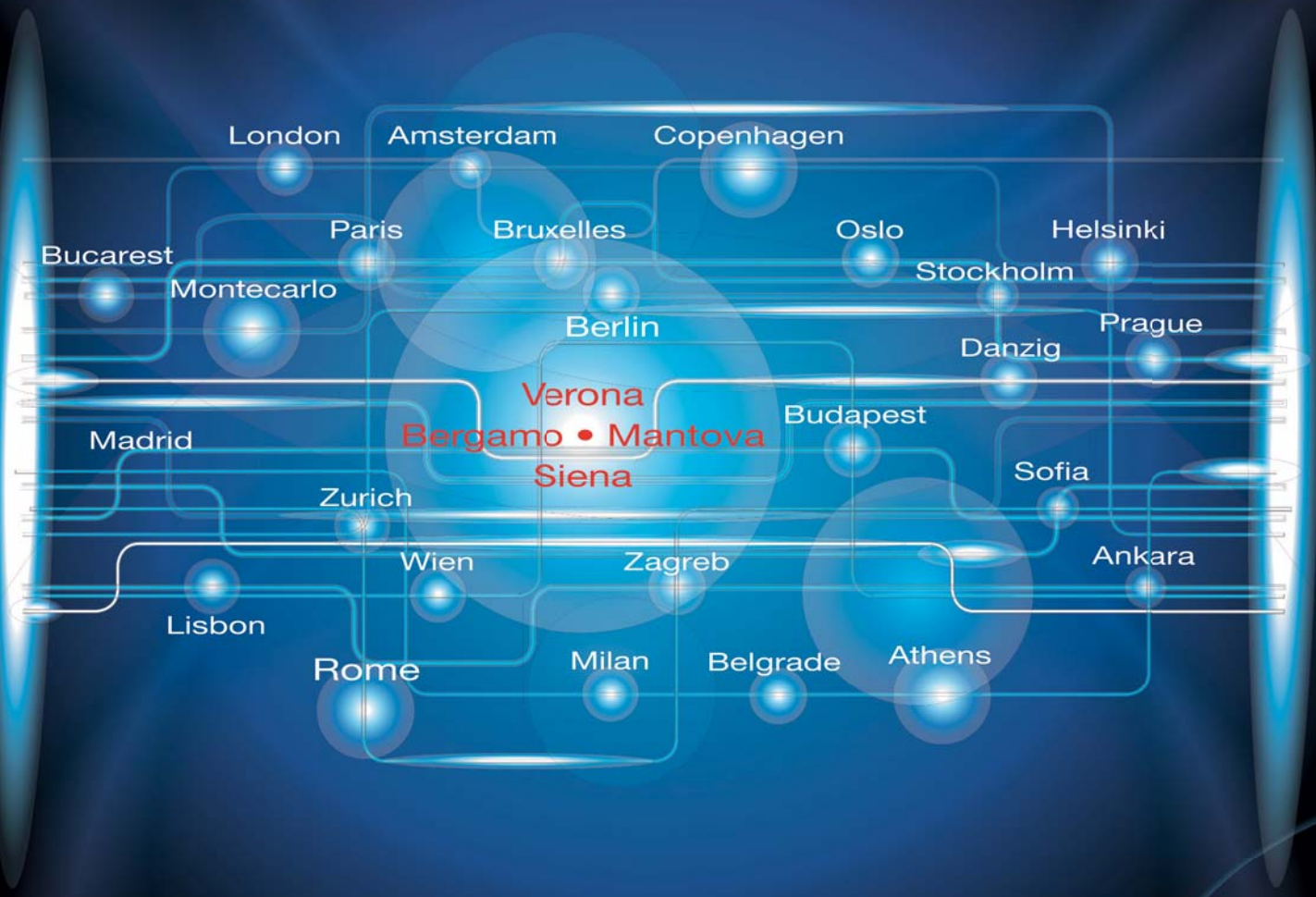
Europe is our business area



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