Superpass Antenna

Frequency Antenna
806 - 960 MHz
902 - 928 MHz
2400 - 2483 MHz
3.4 - 3.7 GHz
5.1 - 5.9 GHz
5.25 - 5.35 GHz
5.4 - 5.7 GHz
5.7 - 5.9 GHz
Ceiling Antenna
Diversity Antenna
Dual-Band Antenna
Dual-Pol Antenna
Wide Band Antenna
802.11N MIMO
Other Frequency
SuperUSB Antenna
Active USB Cable
USB Antenna
Cable& Connector
N Connector
SMA Connector
TNC Connector
Connector Adaptor
NM to NM Cable
NM to NF Cable
NM to RP SMA Cable
NM to RP TNC Cable
NF to NF Cable
NF to U.FL Cable
NF to MMCX Cable

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2.4GHz Dual Polarized Directional Antenna

Model Number: SPDPG-13-H13
Item Price: $59.00

Qty:

Add to Cart

Technical Specification

No.	ITEM	TYPICAL	REMARKS
1	Frequency Range	2400 – 2483 MHz	
2	Impedance	50 Ω	
3	VSWR (or Return Loss)	< 1.5:1 (or > 14dB)	
4	Gain	13dBi @ V-Pol 13dBi @ H-Pol	
5	Polarization	V-Pol & H-Pol, Linear	
6	3dB Horizontal Beamwidth	20deg @ V-Pol 22deg @ H-Pol	
7	3dB Vertical Beamwidth	65deg @ V-Pol 64deg @ H-Pol	
9	Max. Power Input	20W	
10	Connector	N female	Or Custom Design
11	Port to Port Isolation	-30dB Min.	
12	Size	8.5x 11.5 x 1 [inch]	
14	Radome Material	ASA with UV Protection	
15	Radome Color	Gray or White	
16	Case Design	Water Resistance	
17	Weight	0.5 Lb	
18	Wind Loading (Frontal)	> 10Kg	200km/h
19	Temperature Range	-45 to +75° C	
20	Storage Temperature	-30 to +75° C	
21	Sensing Resistor or DC-Ground	DC-Grounded	
22	Life Expectancy	20 years	

HyperLink Wireless 2.4 GHz 14 dBi 90 Degree Dual Polarized Dual-Feed Sector Panel Antenna - Model: HG2414DP-090

Applications and Features

Applications:

- IEEE 802.11b, 802.11g and 802.11n (Pre-N, Draft-N, MIMO) applications
- WiFi and Bluetooth® applications
- Public Wireless Hotspot
- Wireless Video Systems
- Wireless Internet Provider "cell" sites

Features:

- **Vertical and Horizontal polarization**
- **Dual polarity feed system** - (2) N-Female connectors
- All weather operation
- 10° down-tilt mast mounting bracket and hardware
- Includes Mast Mounting Hardware

RoHS Compliant

Description

Superior Performance

The HyperGain® HG2414DP-090 Dual Polarized Sector Panel WiFi Antenna combines high gain with a wide 90° beam-width. It is a professional quality "cell site" antenna designed primarily for service providers in the 2.4GHz ISM band. Applications include IEEE 802.11b, 802.11g and 802.11n wireless LAN systems.

Dual Polarized Design

This antenna features a unique array of cross di-pole elements. The antenna is fed via two N-Female ports, one for vertically polarized and one for horizontally polarized signals. These features make these antennas ideal for polarization diversity systems.

Rugged and Weatherproof

This dual-band sector antenna features a heavy-duty fiberglass radome for all-weather operation. The heavy-duty mounting system allows installation adjusts from 0 to 10 degrees down tilt.

Ideal for Wireless Internet "Cell" Sites

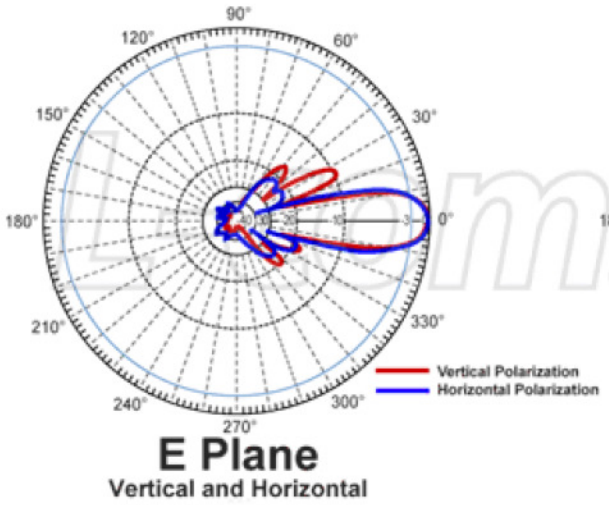
This is an ideal choice for Wireless Internet Provider "cell" sites since the cell size can be easily determined by adjusting the down-tilt angle. Horizontal coverage is a full 90 degrees.

Specifications

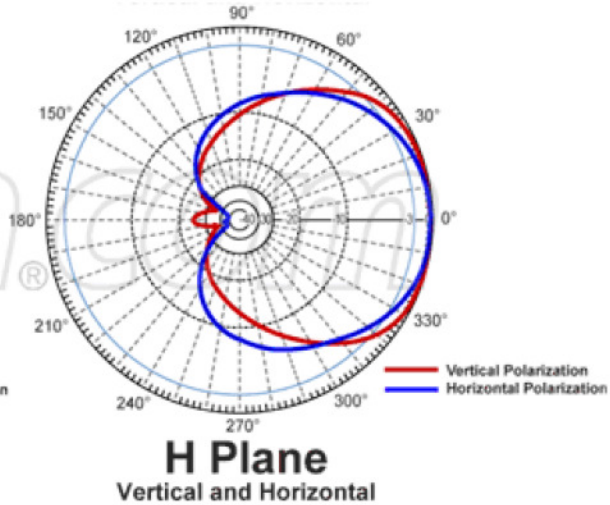
Frequency Range	2400 - 2500 MHz
Gain	14 dBi
Polarization	Vertical and Horizontal
Horizontal Polarization H Plane	75°
Vertical Polarization H Plane	90°
Horizontal Polarization E Plane	16°
Vertical Polarization E Plane	16°
Impedance	50 Ohm
VSWR	≤ 1.5:1 avg.
Front to Back Ratio	≥ 23 dB
Isolation Between Ports	≥ 28 dB
Max. Input Power	200 Watts
Lightning Protection	DC Ground
Connectors	(2) Integral N-Female
Weight	4.4 lbs. (2 kg)
Dimensions	18.3 x 6.3 x 2.3 in (465 x 160 x 60 mm)
Radome Material	UV-inhibited fiberglass
Mounting	1.5" (40 mm) to 2" (53 mm) dia. mast max.
Operating Temperature	-40° C to 60° C (-40° F to 140° F)
Rated Wind	>130 MPH (210 Km/h)
RoHS Compliant	Yes

Wind Loading Data

Wind Speed (MPH)	Loading
100	34 lb.
125	54 lb.



E Plane
Vertical and Horizontal



H Plane
Vertical and Horizontal

Guaranteed Quality: This product is backed by L-Com's Limited Warranty.

Laird Technologies
Web site: www.LairdTech.com

All Categories > Antennas & Reception Solutions > In-Building, CPE, Access Point, and Mobile Client Antennas > WLAN AP and Client Antennas > WLAN > Dual Feed, Linear & Circular Panel Antennas (WLAN) > Item # S9028HVP12NF

Item # S9028HVP12NF, Dual Linear Antennas

larger image

Linear Polarization Panel Antennas

Linearly polarized panel antennas feature high performance and versatility. All antennas in the series are provided with UV stabilized radome enclosures and can be mounted to either interior or exterior wall surfaces or masts in either fixed or articulating configurations. Models are available from 8 dBi to 17 dBi gain.
Integrated coaxial pigtails can be modified for length and connectors can be modified to suit the application.
Consult your Laird Technologies' Sales Representative to discuss these alternatives.

Dual Feed Panel Antennas

Dual feed panel antennas offer two ports for polarization diversity and are well suited to environments where multipath is a concern but space is limited. Polarization diversity allows the user to achieve the desired diversity benefit in the footprint of one antenna. All Laird Technologies dual feed antennas feature a minimum of 18 dB of port isolation.
HVP antennas offer diversity benefits in the foot print of a single antenna.

Circular Polarization Panel Antennas

Circular polarization antennas are a good choice for system applications where remote device orientation is random and widely variable.
Circular Polarized antennas mitigate performance degradation sometimes caused by variation in remote terminal orientation.

Stock Locator

Specifications

Manufacturer	Laird Technologies
Frequency	902 to 928 MHz
Gain	8 dBi
VSWR	1.5:1
Polarization	Dual Linear Vertical & Horizontal
3dB Beamwidth, E Plane	65 °
3dB Beamwidth, H Plane	70 °
	2.2 lbs

Weight	1.00 kg
RF Connector	N (Female)
Dimensions	12 x 12 x 1 3/4 in. 30.5 x 30.5 x 4.4 cm
Power	50 watts
Mounting Style	Surface Wall Mount

Print Back

HyperLink Wireless 2.4 GHz to 5.8 GHz 3 dBi TNC-Male Tri-Band Rubber Duck Antenna

Model: HG2458RD-SM

Applications and Features

- **2.4 GHz - 2.5 GHz Frequency Range:**
  - ◇ 802.11b, 802.11g, 802.11n Access Points and Routers
  - ◇ 2.4 GHz ISM Applications
  - ◇ WiFi Systems
  - ◇ Bluetooth® Applications
  - ◇ Public Wireless Hotspots
  - ◇ Wireless Video Services
- **4.9 GHz - 5.3 GHz Frequency Range:**
  - ◇ 802.11a Access Points and Routers
  - ◇ 5.3 GHz Band Applications
  - ◇ Homeland Security
  - ◇ Public Safety Services: Fire, Police, Security
- **5.7 GHz - 5.8 GHz Frequency Range:**
  - ◇ 5.8 GHz ISM Band Applications
  - ◇ 5.8 GHz UNII Band Applications
  - ◇ WiFi Systems
  - ◇ 5.8 GHz Wireless Video Systems
- Superior performance
- Tri-Band operation
- Better performance then most stock AP antennas
- Flexible "Rubber Duck" antenna
- Tilt and swivel design
- SMA-Male Connector
- RoHS Compliant

RoHS Compliant

Description

The HyperGain® Model HG2458RD is a high performance Tri-Band rubber-duck antenna designed to operate from 2.4 GHz to 2.5 GHz, 4.9 GHz to 5.3 GHz and 5.7 GHz to 5.8 GHz. The Multi-Band design of this antenna eliminates the need to purchase different antennas for each frequency. The Tri-Band design of this antenna helps reduce interference and noise since it will reject out-of-band signals between the three bands of this antenna. This omnidirectional "rubber-duck" antenna provides broad coverage and 3 dBi gain.

Measuring 7.79" long, this flexible antenna features a tilt-and-swivel SMA-Male connector, allowing them to be used vertically, at a right angle, or any angle in-between. It is suitable as a replacement RF antenna for many radios that are equipped with SMA connectors.

Specifications

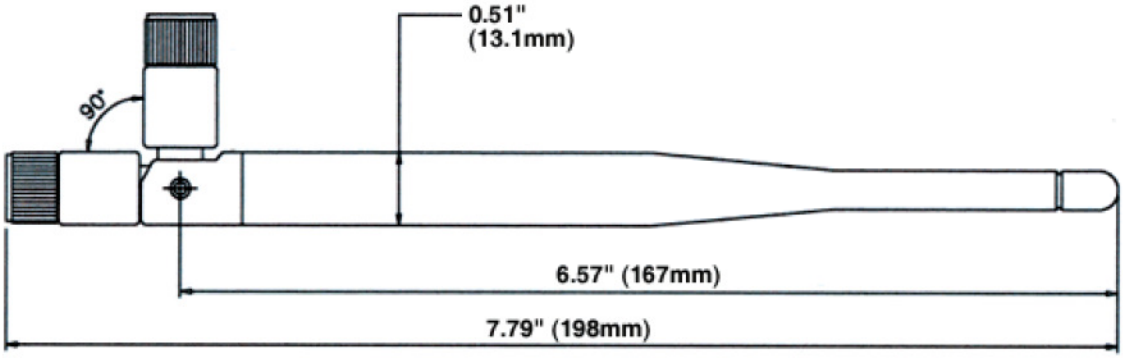
Electrical Specifications

Frequency Ranges	2400-2500 MHz 4900-5350 MHz 5725-5850 MHz
Gain	3 dBi
Horizontal Beam Width	360°
Impedance	50 Ohm
Max. Power	50W
VSWR	< 2:1

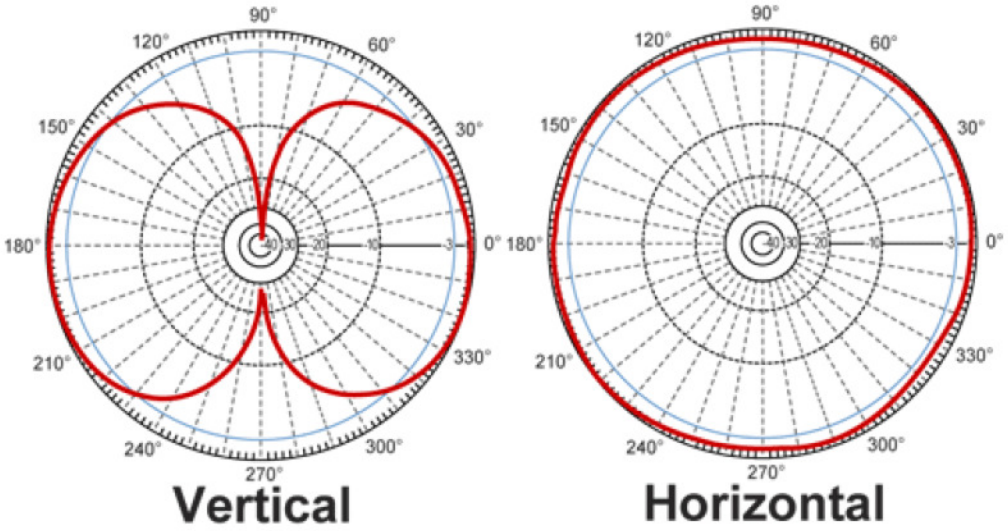
Mechanical Specifications

Weight	.96 oz. (27 g)
Length	7.79" (198 mm)
Max. Diameter	0.51" (13.1 mm)
Finish	Matte Black
Connector	SMA-Male
Operating Temperature	-40° C to 60° C (-40° F to 140° F)
Polarization	Vertical
Flame Rating	UL 94HB
RoHS Compliant	Yes

Dimensions



RF Antenna Patterns



Guaranteed Quality

This product is backed by L-Com's Limited Warranty

x-pol tetra panel antenna

tetracube

customized for your needs

LEANTENNE

tetracube x-pol panel antenna

380 - 470 MHz

Electrical specifications

Frequency range	: 380 – 470 MHz
Input impedance	: 50 Ω
V.S.W.R.	: < 1.5
Isolation between channels	: > 20 dB
Polarization	: ±45°
Gain	: 5.5 dBi
Half-power beam width:	: 105°
Front-to-back ratio	: >25 dB
Lightning protections	: DC grounded
Continuous max power per input	: 500 W
Intermodulation IM3	: <-150 dBc (2x43 dBm carrier)
Operating temperature	: -50°C ÷ 70°C
Radome material	: Taromid B280
Antenna elements	: Stainless steel

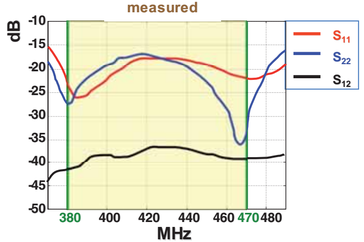
Mechanical specifications

Type of connection	: 2x7/16 female
Dimensions	: 270x270x192 mm
Weight	: 2.8 Kg
Wind load (@ 150 Km/h)	
Frontal	: 100 N
Lateral	: 95 N
Rearside	: 110 N

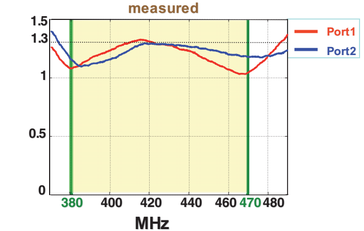
Enviromental conditions

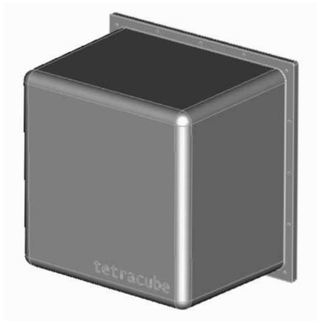
Designed to operate on the environmental conditions as described in ETS 300 019-1-4.

S-parameters measured



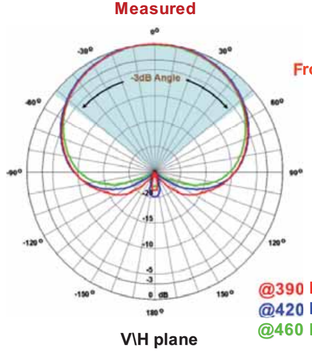
VSWR measured





Radiation Pattern for ±45° Polarization

Measured



V\H plane

Front to Back Ratio >25 dB

3dB Angle ~105 deg

@390 MHz
@420 MHz
@460 MHz

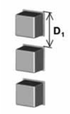
Configuration Type

2x1 Configuration

Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	8 - 9	8 - 9.5	8.5 - 9.5
HPBWh (deg)	108°	110°	110°
HPBWv (deg)	55° - 45°	53° - 36°	50° - 36°

Physical Dimension	
D_1	35 - 50 cm
Length	62 - 77 cm
Width	27 cm

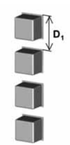
3x1 Configuration



Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	10.5 - 11.5	10.5 - 11.5	10.5 - 11.5
HPBWh (deg)	108°	110°	110°
HPBWv (deg)	32° - 22°	30° - 20°	28° - 20°

Physical Dimension	
D_1	40 - 60 cm
Length	107 - 7147 cm
Width	27 cm

4x1 Configuration



Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	11.5 - 12.5	11.5 - 12.5	11.5 - 12.5
HPBWh (deg)	108°	110°	110°
HPBWv (deg)	24° - 16°	22° - 16°	22° - 14°

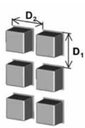
Physical Dimension	
D_1	40 - 60 cm
Length	147 - 207 cm
Width	27 cm

2x2 Configuration

Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	10.5 - 13	10.5 - 13	10.5 - 13
HPBWh (deg)	55° - 40°	53° - 36°	50° - 36°
HPBWv (deg)	55° - 40°	53° - 36°	50° - 36°

Physical Dimension	
D_1	35 - 50 cm
D_2	35 - 50 cm
Length	62 - 77 cm
Width	62 - 77 cm

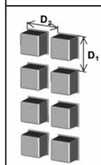
3x2 Configuration



Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	12.5 - 15	13 - 15	13 - 15
HPBWh (deg)	32° - 22°	30° - 20°	28° - 20°
HPBWv (deg)	32° - 22°	30° - 20°	28° - 20°

Physical Dimension	
D_1	40 - 60 cm
D_2	35 - 50 cm
Length	107 - 147 cm
Width	62 - 77 cm

4x2 Configuration

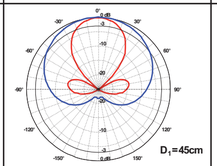


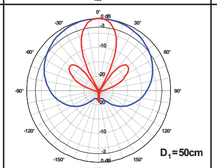
Radiaton Features			
Freq.	@390MHz	@420MHz	@460MHz
Gain (dBi)	14 - 16	14.5 - 16.5	14.5 - 16.5
HPBWh (deg)	55° - 40°	53° - 36°	50° - 36°
HPBWv (deg)	24° - 16°	22° - 16°	22° - 14°

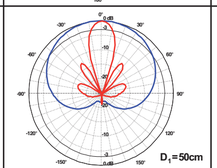
Physical Dimension	
D_1	40 - 60 cm
D_2	35 - 50 cm
Length	147 - 207 cm
Width	62 - 77 cm

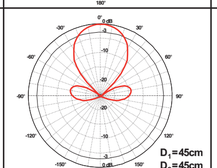
Radiation Pattern

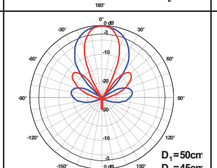
H plane — V plane

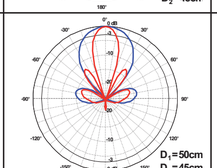






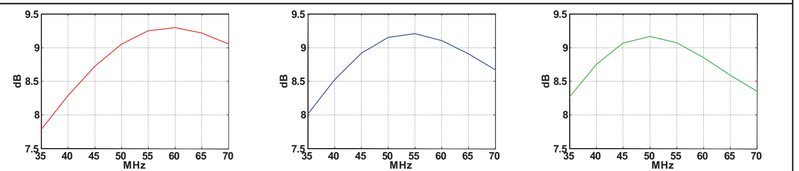


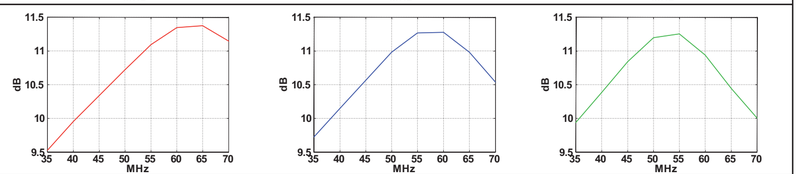


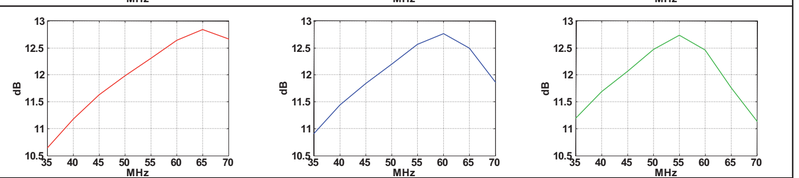


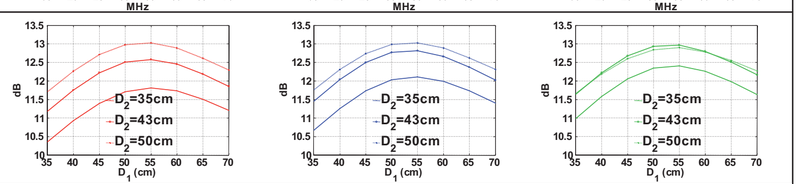
Variation of the Max Gain with the elements distance

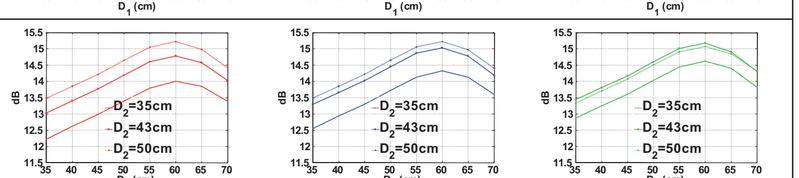
@390 MHz — @420 MHz — @460 MHz

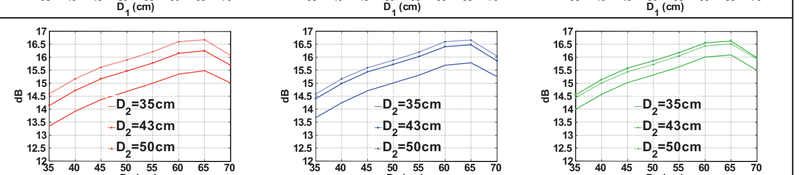










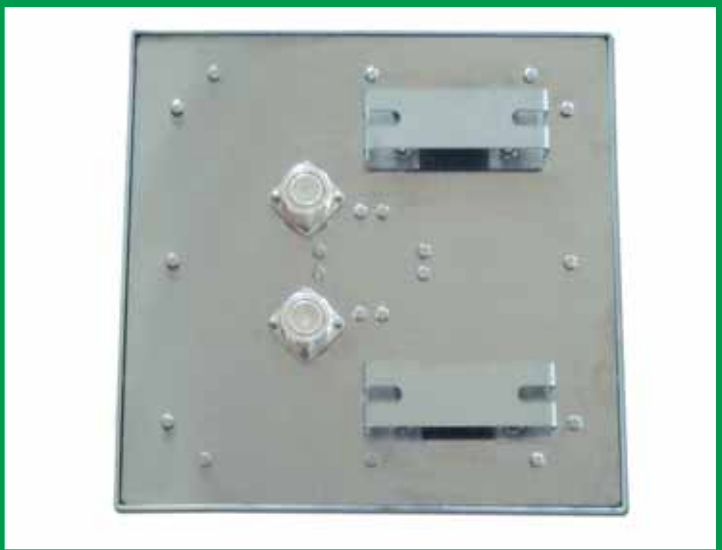


components for configuration

configuration	tetracube modules	array feeding 2-ways	array feeding 3-ways	array feeding 4-ways	vertical mast	horizontal mast	down - tilt electrical or mechanical	
2x1	2 pcs	2 pcs	---	---	1 pcs type 77	---	---	available
3x1	3 pcs	---	2 pcs	---	1 pcs type 147	---	available	available
4x1	4 pcs	---	---	2 pcs	1 pcs type 207	---	available	available
2x2	4 pcs	---	---	2 pcs	2 pcs type 77	2 pcs type 77	---	available
3x2	6 pcs	2 pcs	2 pcs	---	2 pcs type 147	2 pcs type 77	available	available
4x2	8 pcs	2 pcs	---	2 pcs	2 pcs type 207	2 pcs type 77	available	available

Our array feeding are IP67, assembled with high quality flexible cable.
Return Loss (RL) <-22 dB,
Insertion Loss (IL) <0.5 dB
in frequency band 380-470 MHz.

All antenna elements are made in stainless steel with 7/16 silver plated connectors.
Tetracube is equipped with 2 stainless steel clamps.



Traditional tetra panel antenna
lenght around 2 meters, 22 Kg
(only antenna, mast not included)

TETRACUBE panel antenna
lenght around 1.5 meters, 12 Kg
(only antennas; mast not included)

ADVANTAGES OF TETRACUBE Vs. TRADITIONAL PANEL ANTENNA

Tetracube is a smaller smart panel antenna.
Thanks to its own modularity, you can tailor-made antenna on your needs, by adding more modules.

You can have good performances with smaller dimension, reducing weight and wind resistance.

This way makes the installation easier.

Thanks to its very large bandwidth, you can reduce the stock in your storehouse: with a single code, you can cover all tetra markets: civil; military and trasportation.

λεα
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