

P1-X20-T1

Features

- 2 ports / 1 cross pol system in low band (410-470 MHz)
- Fixed electrical tilt
- 2x2 MIMO application



PRODUCT OVERVIEW	Frequency Range (MHz)	(1x) 410-470
	Array	■ R1
	Connector	1-2
		2 PORTS
	Polarization	XPOL
	Azimuth Beamwidth (avg)	65°
	Electrical Downtilt	0°
	Dimensions	2130 x 499 x 215 mm (83.9 x 19.6 x 8.5 in)

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	CONFIGURATION	MOUNTING HARDWARE	MOUNTING PIPE DIAMETER	SHIPPING WEIGHT
P1-X20-T1	Fixed Electrical Tilt	APM50-M1	50-110 mm (2.0-4.3 in)	38.5 kg (84.9 lbs)



Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

65°

2130 mm

FIXED TILT

P1-X20-T1

ELECTRICAL SPECIFICATIONS

■ R1

Frequency Range	MHz	410-470	
Polarization	---	±45°	
Gain	Over all Tilts	dBi	14.3 ± 0.3
	Max Gain	dBi	14.6
Azimuth Beamwidth (3 dB)	degrees	66.7° ± 0.8°	
Elevation Beamwidth (3 dB)	degrees	17.7° ± 1.1°	
Electrical Downtilt	degrees	0°	
Impedance	Ohms	50Ω	
VSWR (Return Loss)	---	1.5:1 (-14 dB)	
Front-to-Back Ratio, Total Power, ± 30°	dB	22.6	
First Upper Side Lobe Suppression	dB	16.3	
Cross Polar Discrimination Over Sector	dB	15.5	
Cross Polar Discrimination (XPD) at Mechanical Boresight (0°)	dB	28.2	
Maximum Effective Power Per Port	Watts	300 W	
Cross Polar Isolation	dB	25	

Specifications follow BASTA guidelines.

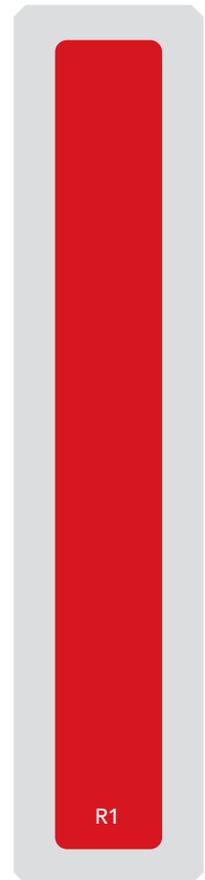
P1-X20-T1

BOTTOM VIEW - LABELING



ARRAY LAYOUT

ARRAY	FREQUENCY	CONNECTOR	CONNECTOR TYPE
■ R1	410-470 MHz	1-2	(2x) 4.3-10 Female



The illustration is not shown to scale.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

P1-X20-T1

MECHANICAL SPECIFICATIONS

Length	mm (in)	2130 (83.9)
Width	mm (in)	499 (19.6)
Depth	mm (in)	215 (8.5)
Net Weight - Antenna Only	kg (lbs)	25 (55.1)
Net Weight - Mounting Hardware Only	kg (lbs)	5.4 (11.9)
Wind Load Rated at 150 km/h (93 mph)	Frontal, Resultant	N (lbf) 697 (157)
	Side, Resultant	N (lbf) 586 (132)
	Rear, Resultant	N (lbf) 807 (181)
	Maximum, Resultant	N (lbf) 1333 (300)
	Maximum, Drag Force	N (lbf) 1180 (265)
Survival Wind Speed / Rated Wind Speed	km/h (mph)	200 (150)
Connector Type	--	(2x) 4.3-10 Female at Bottom
Radome Color	---	Light Grey RAL7035
Radome Material	---	Fiberglass
Lightning Protection	---	Direct Ground
Shipping	Packing Size (Length x Width x Depth)	mm (in) 2380 x 650 x 355 (93.7 x 25.6 x 14.0)
	Shipping Weight	kg (lbs) 38.5 (84.9)

ENVIRONMENTAL SPECIFICATIONS

Environmental Standard	---	ETS 300 019
Operating Temperature	degrees	-40° to +70° C (-40° to +158° F)
Product Environmental Compliance	---	Product is RoHS Compliant

P1-X20-T1

ACCESSORIES Accessories may be ordered separately unless otherwise indicated.

ITEM	MODEL NUMBER	WEIGHT
Beam Tilt Mounting Bracket Kit for Pole Diameter 50-110 mm (2.0-4.3 in) <i>Shipped with antenna</i>	APM50-M1	5.4 kg (11.9 lbs)

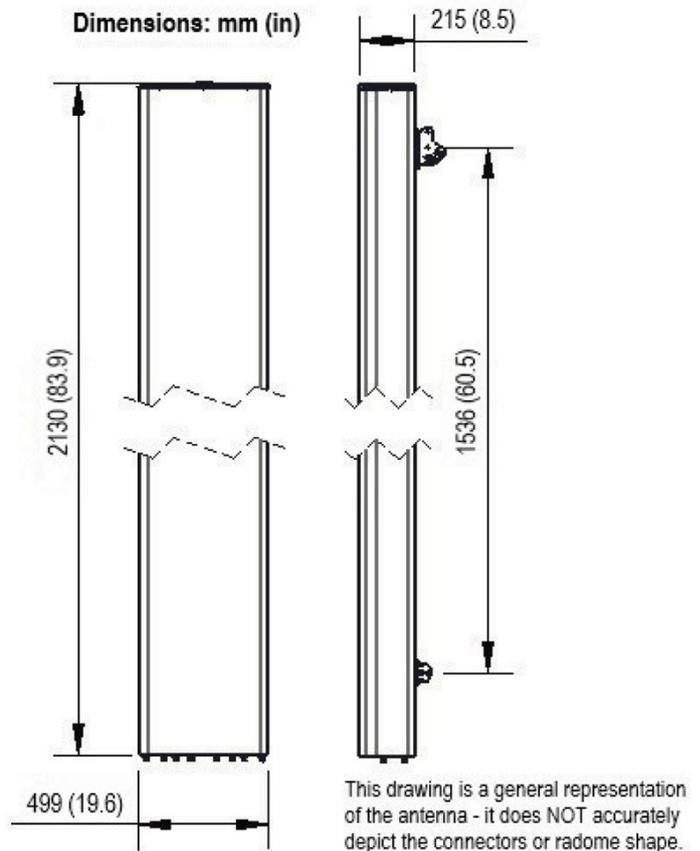
INSTALLATION Please read all installation notes before installing product.



- Always attach the antenna using all mounting points.
- Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[APM50 Mounting Kit Series Installation Instructions](#)



NOTES

Specifications follow BASTA guidelines.

For additional mounting information, please check **External Document Links**.

For Radiating Patterns: [Request pattern files](#)