Product Data Sheet APXV18-206516S-C

Optimizer® Panel Dual Polarized Antenna

Product Description

This X-Polarized variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range. This antenna is optimized for performance across the entire frequency band (1710-2200 MHz).



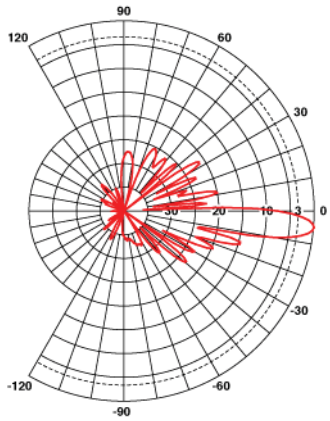
Features/Benefits

- **Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.**
- **High Suppression of all Upper Sidelobes (Typically <-18dB).**
- **Gain tracking – difference between AWS UL (1710-1755 MHz) and DL (2110-2155 MHz) <1dB.**
- **Azimuth horizontal beamwidth difference <6deg between AWS UL (1710-1755 MHz) and DL (2110-2155 MHz)**
- **Low profile for low visual impact.**
- **Dual polarization; Broadband design.**

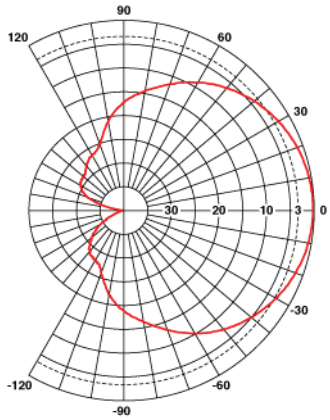
Technical Specifications

Electrical Specifications

Frequency Range, MHz	1710-2200
Antenna Type	Panel Dual Polarized
Electrical Down Tilt Option	Variable
Gain, dBi (dBd)	18.4 (16.3)
Electrical Downtilt, deg	0-10
Horizontal Beamwidth, deg	65
VSWR	< 1.5:1
Vertical Beamwidth, deg	5.9 to 7.7
1st Upper Sidelobe Suppression, dB	> 18
Upper Sidelobe Suppression, dB	> 18 all
Polarization	Dual pol +/-45°
Front-To-Back Ratio, dB	>26 (typically 28)
Maximum Power Input, W	300
Isolation between Ports, dB	> 30
Lightning Protection	Direct Ground
3rd Order IMP @ 2 x 43 dBm, dBc	> 150 (155 Typical)



Vertical Pattern



Horizontal Pattern

Mechanical Specifications

Rated Wind Speed, km/h (mph)	160 (100)
Survival Wind Speed, km/h (mph)	200 (125)
Max Wind Loading Area, m² (ft²)	0.29 (2.9)
Maximum Thrust @ Rated Wind, N (lbf)	380 (185)
Front Thrust @ Rated Wind, N (lbf)	380 (185)
Reflector Material	Aluminum
Radiating Element Material	Brass
Radome Material	Fiberglass
Connector Type	(2) 7-16 DIN Female
Connector Location	Bottom
Mount Type	Downtilt
Mounting Hardware	APM40-2
Weight w/o Mtg Hardware, kg (lb)	8.5 (18.7)
Packing Dimensions, HxWxD, mm (in)	1520 x 260 x 200 (59.8 x 10.2 x 7.8)
Dimensions - HxWxD, mm (in)	1349 x 175 x 80 (53.1 x 6.9 x 3.15)
Shipping Weight without mounting hardware, kg (lb)	8.5 (18.7)

All information contained in the present datasheet is subject to confirmation at time of ordering.