

Multi-Band Vertical Polarized Antenna

This multi-band antenna is vertically polarized. It is designed for use in DCS/PCS/WCDMA/CDMA2000 networks and operates in the frequency range of 1710-2170 MHz with a gain of 15 dBi.

DCS/PCS/WCDMA/CDMA2000 多频段天线		VPol 1710-2170MHz 65° 15dBi	
Multi-Band Antenna		TDJ-18192015A-65PT/16	
Electrical specifications			
Frequency range (MHz)	1710-1880	1850-1990	1920-2170
Polarization	Vertical	Vertical	Vertical
Gain (dBi)	14.5	15	15
Electrical downtilt (°)	0/5	0/5	0/5
Half-power beam width (°)	Haz: 65 Vert: 13.5	Haz: 65 Vert: 14	Haz: 65 Vert: 14
Sidelobe suppression (Front sidelobe above backscatter)	>16	>16	>16
Front-to-back ratio (dB)	>28	>28	>28
Impedance (Ω)	50		
VSWR	<1.4		
Intermodulation IM3 (2 × 43dBm carrier/1dBm)	< -107		
Max power per input (W)	300		
Lightning Protection	DC Ground		



Overview

High-Performance Multi-Band Antenna

This multi-band vertical polarized antenna is engineered for versatile deployment across DCS, PCS, WCDMA, and CDMA2000 networks. Operating within the 1710-2170 MHz frequency range, it delivers a consistent 15 dBi gain and optimized beam width, ensuring reliable signal coverage. With robust construction including DC Ground lightning protection and a 300W power handling capacity, it is designed for demanding telecommunications infrastructure environments.

Electrical Specifications

Gain

15 dBi

Peak Gain

Lightning Protection

DC Ground

Frequency Range	1710-1880 MHz, 1850-1990 MHz, 1920-2170 MHz
Polarization	Vertical
Impedance	50 Ohms
VSWR	1.4
Max Power per Input	300 W

Performance Metrics

Beam Width Specifications

Metric	Value
Horizontal Beam Width	65°
Vertical Beam Width	13.5° - 14°
Electrical Downtilt	0/6°

Signal Quality Metrics

- Sidelobe suppression: ≥ 16 dB
- Front-to-back ratio: > 28 dB
- Intermodulation IM3: < -107 dBm (2x43dBm carrier)