Directional Smart Antenna Array

This directional smart antenna array is designed for focused signal transmission. It operates within a frequency range of 1785-1805 MHz and features lightning protection with a direct DC ground.

Overview

High-Performance Directional Smart Antenna Array

The TYDA-1815B is a professional-grade directional smart antenna array engineered for precise signal transmission in the 1785-1805 MHz frequency range. It features advanced beam-forming capabilities, achieving a high array gain of 23.5 dBi to ensure robust connectivity. Designed for reliability, the unit includes integrated lightning protection via direct DC grounding and maintains strict phase and magnitude consistency for optimal performance.

Electrical Specifications

Frequency Range	1785-1805 MHz
Impedance	50 Ohms
VSWR	1.35
Maximum Input Power	50 W

Performance Metrics

Key Performance Metrics

15 dBi	23.5 dBi	23 dB	18 dB
Individual Antenna Gain	Beam-formed Array Gain	Front-to-Back Ratio	Antenna-to-Antenna Isolation

Beam Characteristics

Beam Width

Plane	Width
H-Plane	90°
E-Plane	7.5°

Calibration and Protection

Calibration Deviations

- Phase Deviation: ±5°
- Magnitude Deviation: ±0.5 dB

Lightning Protection

Direct DC Ground

General	
Polarization	Vertical