

AT-DF-0.1-1-S



Please contact AntennaTec for a full interface control drawing.

100 MHz-1 GHz dual band DF antenna system fitted with an SMA connectors

Key Specifications

Operating frequency band A	100-400 MHz
Operating frequency band B	400 MHz- 1 GHz
Connector	SMA female
VSWR	< 2:1
Gain	2 dBi
H-plane Beamwidth	360 degrees
Polarization	vertical
Impedence	50 Ω

This dual-band DF antenna system covers the 100 MHz–1 GHz frequency range and is designed for receive-side direction finding, spectrum monitoring, and signal-location applications across VHF and UHF bands. The system uses a five-element dipole interferometer arrangement per band and is intended for operation with a compatible 5-channel phase-sensitive DF receiver using a correlative interferometer DF algorithm. Its full-size vertically polarised dipole elements provide 360-degree H-plane coverage, stable DF sensitivity, and reliable broadband bearing performance, while the SMA interfaces, RG-400 output cables, fixed mast mounting, corrosion-resistant aluminium construction, and outdoor weatherproof design support practical deployment in fixed monitoring stations, mobile DF platforms, spectrum enforcement, border/coastal surveillance, and field-deployed RF monitoring applications.

SPECIFICATIONS

Antenna type	Five-element DF interferometer
Frequency coverage	Band A: 100-400 MHz Band B: 400 MHz- 1 GHz
DF receiver capability	Compatible with 5-channel phase-sensitive DF receivers
DF method	Correlative interferometer direction finding
Number of antenna elements	10 elements, 5 elements per band
Operating mode	Receive-side DF and monitoring antenna system
Polarization	Vertical
Azimuth coverage	360° H-plane coverage
Output cables	RG-400 coaxial cables
RF connectors	SMA female
Mounting configuration	Fixed mast mount
Mechanical construction	Corrosion-resistant aluminum
Environmental protection	Outdoor weatherproof design
Characterization	Antenna characterisation/calibration data available on request
Typical Applications	Spectrum monitoring, RF surveillance, signal location, mobile DF platforms, border/coastal monitoring, fixed monitoring stations

Antenna characterisation and calibration data for use with compatible DF receivers can be provided on request.

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