

OmniShield Antenna Series

State-of-the-Art

Wideband Monitoring Antennas



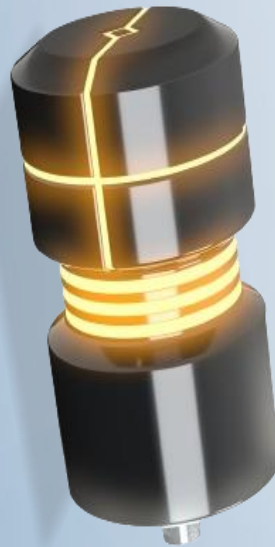
Compact and Light Weight



20 MHz - 40 GHz Operation



EW/SIGINT/COMINT



Stable Omni Pattern



Corrosion Resistant



Upto 10 W Power Handling



The OmniShield Antenna lineup is engineered to meet the stringent demands of advanced communication and testing systems with its outstanding broadband performance, omnidirectional radiation pattern, and robust design. These antennas are essential for electromagnetic compatibility (EMC) testing, ensuring accurate measurement of radiated emissions and immunity across wide frequency ranges. In spectrum monitoring, the OmniShield antennas deliver comprehensive frequency coverage and high sensitivity, allowing precise detection and analysis of signals. For research and development, these antennas provide reliable, repeatable performance for a variety of RF experiments and antenna calibrations, making them indispensable in both laboratory and field environments.

Applications

- Military and Defense: Used for wideband communication systems, EW, and SIGINT
- Broadband Communication Systems: Single antenna for wideband coverage
- Spectrum Monitoring and Measurement: Detect, analyze, and manage radio frequencies
- EMC Testing: Measure EMI and ensure compliance with regulatory standards
- Broadcasting: Transmit and receive signals for AM/FM radio and VHF/UHF TV
- Antenna Calibration and Testing: Used as reference antenna

Electrical Specifications

Parameter	OS0028_M	OS046_C	OS0826	OS2640
Frequency Range	20 MHz – 8 GHz	400 MHz – 6 GHz	800 MHz – 26.5 GHz	26.5 GHz – 40 GHz
VSWR	2.5:1 (max) 2:1 (typ)	2:1 (typ)	2.5:1 (freq < 1 GHz) 2:1 (freq ≥ 1 GHz)	2.5:1 (typ)
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Gain	-35 dBi – 4.5 dBi	-2 dBi – 5 dBi	4 dBi (typ)	2 dBi (typ)
Directionality	Omni	Omni	Omni	Omni
Polarization	Linear	Linear	Linear	LHCP/RHCP
3dB Beamwidth	25° – 90°	30° – 90°	40° – 100°	20° (typ)
Axial Ratio	-	-	-	<3 dB
Power Handling	10W CW	5W CW	5W CW	5W CW

Mechanical Specifications

Parameter	OS0026_M	OS046_C	VW218	VW1840
Connector	N-Type Female	SMA Female	PC 3.5 Female	K-type (2.92 mm)
Diameter	16 cm	11 cm	21 cm	9.5 cm
Height	60 cm	18 cm	26.5 cm	13 cm
Weight	<1.9 Kg	<1.2 Kg	<1.5 Kg	<900 grams
Operating Temp	-35°C – 65°C	-35°C – 65°C	-35°C – 65°C	-35°C – 65°C
Construction	Aluminum & Engineering Plastics	Aluminum & Engineering Plastics	Aluminum & Engineering Plastics	Aluminum & Engineering Plastics