

INSTRUCTION MANUAL

OMNI-DIRECTIONAL

ANTENNA

MODEL EM-6116

2 GHz - 10 GHz

INSTRUCTION MANUAL

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ELECTRO-METRICS

MODEL EM-6116

SERIAL NO:

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WARRANTY

This Model EM-6116 Omni-Directional Antenna is warranted for a period of 12 months (USA only) from date of shipment against defective materials and workmanship. This warranty is limited to the repair of or replacement of defective parts and is void if unauthorized repair or modification is attempted. Repairs for damage due to misuse or abnormal operating conditions will be performed at the factory and will be billed at our commercial hourly rates. Our estimate will be provided before the work is started.

DESCRIPTION AND USE ELECTRO-METRICS MODEL EM-6116 OMNI-DIRECTIONAL ANTENNA

1.0 Description

The Model EM-6116 Omni-directional Antenna is a vertically-polarized broadband antenna operating from 2 to 10 GHz. The antenna can operate as either a transmitting or receiving antenna with a flat frequency and omni-directional response.

The antenna is enclosed within a weather resistant radome for environmental protection. The small size of the EM-6116 is ideal for covert applications.

The antenna is calibrated at 1 meter with the calibration data included in the manual as gain and antenna factors vs frequency.

2.0 Specifications

2.1 Electrical

Frequency Range 2 GHz to 10 GHz.

Gain, nominal +1 dBi

Deviation from Omni: $\pm 1.0 \text{ dB}$

Impedance 50Ω

VSWR: 2.0:1 Maximum

Power Handling: 25 Watts

Connector: Type "N" Female

2.2 Mechanical

Length: 8.5 cm (3.35").

Length over connector:: 10.4 cm (4.1").

Diameter: $5.1 \text{ cm} (2.0^{\circ})$

Weight: 204 g (7.2 ounces).

3.0 Calibration Data

The Electro-Metrics Model EM-6116 Omni-directional Antenna is calibrated at 1 Meter. The data is presented in tabulated form as Gain and Antenna Factors versus Frequency, Figure 1.

Figure 1

Gain And Antenna Factors

Model EM-6116

Omni-Directional Wideband Antenna

1 Meter Calibration

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