

Features

SHE100K18G

- Electric E-Field Sensor Head
- Isotropic
- 100kHz-18GHz
- 52dB dynamic range
- Sensitivity 0.8 V/m

The SHE100K18G E-field sensor head is based on a set of three mutually orthogonal diode dipoles. The three voltages which correspond to the spatial components are individually available at the sensor head output. An SM-series meter (required for use of this sensor head) calculates the resulting isotropic field strength.

This sensor head detects electric fields from 100 kHz to 18 GHz covering those fields that typically

occur in broadcasting, telecoms, ISM and industry. The characteristics of this sensor head comply with the requirements for instruments measuring human exposure to electric fields as required by law in both public and professional environments. The sensor head is supplied with factory calibration. This model is also available in an M1version which includes an accredited 17025compliant calibration.

Typical Applications

- Radio Links.
- Satellite communications, Broadcast towers
- Microwave Leak detection

Specifications

Frequency Range: 100 kHz-18 GHz

Type of Frequency Response: Flat

Measurement Range: 0.8–340 V/m CW

Dynamic Range: 52 dB

Sensor Type: Diode Dipoles

Directivity: Isotropic

Accuracy:

Flatness Frequency Response: $\pm 1.5 \text{ dB} (100 \text{ kHz}-3 \text{ GHz})$ $\pm 3 \text{ dB} (3 \text{ GHz}-18 \text{ GHz})$

Linearity: ±0.5 dB (2–200 V/m)

Isotropic Response (@ 100MHz): ±0.5 dB

Operation Temperature: 0°C–50°C Size: 327 x 60 mm, 12.88 x 2.4 Weight: 135g, 4.77 oz Export Classification: EAR99

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