

## SHE3M40G

- Electric E-Field Sensor Head
- Isotropic
- 3MHz-40GHz
- >56dB dynamic range
- Sensitivity 0.5 V/m

## **Features**

The SHE3M40G 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 3 MHz to 40 GHz covering those fields that typically occur in Industrial and Medical environments (ISM). 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 M1-version which includes an accredited 17025-compliant calibration.

## Typical Applications

- Radio Links
- Satellite communications, broadcast towers
- Microwave leak detection

## Specifications

Frequency Range: 3 MHz–40 GHz

Type of Frequency Response: Flat

Measurement Range: 0.5–350 V/m CW

Dynamic Range: >56 dB

**Sensor Type:** Diode-based system **Directivity:** Isotropic (tri-axial)

Accuracy:

Flatness Frequency Response: -3/+0 dB (3 MHz-10 MHz)

±0.8 dB (10 MHz=1.8 GHz) ±3 dB (1.8 GHz=18 GHz) ±5 dB (18 GHz=40 GHz)

**Linearity:**  $\pm 0.5 \text{ dB} (2-350 \text{ V/m})$ 

Isotropic Response (@ 100 MHz):  $\pm 0.4$  dB Isotropic Response (@ 1 GHz):  $\pm 0.5$  dB

Operation Temperature:  $0^{\circ}C-50^{\circ}C$ Size:  $327 \times 60$  mm,  $12.88 \times 2.4$  in

Weight: 120g, 4.25 oz Export Classification: EAR99

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