

03E PROBE

Electric Field Probe: E Field, 1 MHz ÷ 18 GHz

Key Features:

- Frequency range: 1 MHz ÷ 18 GHz
- Dynamic Range: > 50 dB
- Directivity: Isotropic



Compatibility:

- NHT310F and NHT3DL meters

Typical Application:

- Wireless telecommunication systems such as mobile phone base stations, satellite communication equipment, Broadcasting equipment, Wi-Fi, Wi-Max, LTE and 5G
- Industrial ovens, welding systems, RF heating, tempering and drying systems
- Diathermy equipment and medical devices RF generators, NMR machines
- Power plants and related maintenance and control systems
- Sensitive site (hospital)
- Measurement systems for railway and round transport

Information subject to change without prior notice

MICRORAD

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Description:

The 03E probe is based on a set of three mutually orthogonal diode dipoles. The signal from the three dipoles is used by Microrad instruments to calculate the isotropic value of the field.

The 03E probe is able to detect both CW (Continuous Wave) and modulated signals in the frequency ranges from 1MHz to 18GHz, allowing operators to cover applications in the industrial, scientific, medical, telecommunications and power plants sectors.

The high sensitivity of this probe makes it ideal for protectionist measurement of human exposure to electric fields in both public and professional environments.

The introduction of the signal envelope sampling technique, carried out with the NHT3DL and NHT310F meters, allows not only a reliable reading of the field value, but also, for the first time, the graphical representation in the time domain of the form factor of the analyzed signal. This innovative technique opens up new analytical perspectives, allowing to distinguish and evaluate intermittent or pulse signals with important crest factors such as those typical of 5G mobile telephones or radar.

TECHNICAL SPECIFICATIONS	
Frequency range	1 MHz ÷ 18 GHz
Type of frequency response	Flat
Measurement range	1 ÷ 350 V/m (cw)
Sensor type	Diode dipoles
Directivity	Isotropic
Frequency response (typical)	± 1.5 dB (1 MHz ÷ 3 GHz)
	± 3 dB (3 GHz ÷ 18 GHz)
Linearity	± 0.5 dB (2 ÷ 200 V/m)
Isotropic response	± 0.5 dB (@100 MHz)

GENERAL CHARACTERISTICS	
Recommended calibration interval	24 months
Operating temperature	-10°C ÷ 50°C
Size	327 x 60 Ø(mm)
Weight	120 g
Country of origin	Italy

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