

Specification Meter RFP-04CE, Probe- PI-01V-900/1900 MHz

Portable EM field meter (E-Field) with detachable isotropic probe.

Wide dynamic range: 0.2 - 400 V/m.

Resolution (at range): 0.01 V/m (2 V/m and 20 V/m),

0.1 V/m (200 V/m), 1 V/m (600 V/m).

Selective <u>frequency range</u>: 900-1900 MHz.

Calibration frequency ranges: 925-960 MHz and 1805-1880 MHz.
 Probe <u>directivity</u>: Omni directional (Isotropic probe).

Ranges (V/m, full scale): 2, 20, 200, 600.

Calibration <u>accuracy:</u> +/- 0.5 dB (at reference levels).

<u>Linearity</u> deviation: +/- 1.5 dB (any range 10-150% of full

scale). Typically +/- 1 dB.

In band response flatness: +/- 1 dB (925-960 MHz),

+/- 1 dB (1805-1880 MHz),

Off band attenuation:
 3 dB @ 880 MHz, >10 dB @ F<750 MHz,

3 dB @ 1950 MHz, >10 dB @ F>2050 MHz.

Probe rotational <u>isotropicity</u>: \pm +/- 0.6 dB.

Operating modes: Average, Pulse and Peak.

Reading: RMS (root mean square) in all modes:

Average: RMS (Averaged over Tav).

Pulse: 0.707 x Instant Value (Averaged over Tp).
Peak: 0.707 x Peak Value (Averaged over Ts).

Response times for different operating modes:

Average (Slow Response): Tav (averaging slow time)=2 sec.
Pulse (Fast Response): Tp (averaging fast time)=100 ms.
Peak (Peak Response): Ts (sample time)=50 ms, Th(hold

time)=14 sec.

 <u>Auto zeroing</u> (automatic and/or user activated) operates even at strong EM fields, and eliminates temperature induced offset errors.

Display: LCD 3.5 Digits, with over-range feature.

- Remote monitor: Special 1.8 m (6 ft.) cable (supplied with unit) allows remote output monitoring by data logger, scope or voltmeter.
- PC <u>data streaming</u> allows fast data transfer (120 samples/sec.) through AC/RF decoupled DAQ box to serial RS232 port.
- <u>Data logging</u> allows the use of portable battery operated data loggers for data storage and PC transfer at a later time.
- Design: rugged metal hand held enclosure. Probe is mounted on nonmetal handle and can be removed for cable operation at a distance.
- Standard tripod mount (1/4"-20) for meter, probe clip and nonmetal portable tripod are provided.



Operating temperature: 5 C° to 40° C, RH 10%-90%, non-condensing.

<u>Temperature error</u>: <0.08 dB/°C (range 2 V/m), <0.05 dB/°C (other ranges).

Dimensions: Meter (hxwxd) 130x80x30 mm., 5x3.125x1.25 inch,

Probe (LxD) 230x58 mm, 9.0x2.25 inch.

Weight: Meter 225 g., 0.5 lb; Probe 100 g., 0.2 lb.

Battery life: 100 hr. with user replaceable 9V battery (included).

Low battery indicator.

 <u>Calibration</u>: Every unit is individually calibrated for absolute test levels and linearity at specified frequencies. NIST traceable Calibration certificate is supplied with each unit.

 Accessories: Smart Fieldmeter ® comes in a hard carrying case and includes the RFP-04CE Meter with installed battery, PI-01V Isotropic Probe together with probe cable, remote monitor cable, tripod, probe clip and product documentation.

Probe PI-01V-900/1900 Typical Frequency Response

