

# Probe PI-7P for Smart Fieldmeter® Digital

**Isotropic Electric Field Probe PI-07P:**  
**100 MHz-60 GHz, 4-3000 V/m**  
**for HIRF (High Intensity Radiated Fields) applications.**

Broadband active isotropic electric field probe **PI-07P** with two modes of operation **Pulse** and **Average**:

in **Pulse** mode (with included **PU-5P** power unit) it measures the amplitude of pulsed RF fields from RF and microwave sources (**microwave radars**) with **fast sampling detection capability of 1 us (one microsecond)**.

In **Average** mode it operates as standard isotropic field probe, measuring the RMS field strength of CW and AM/FM modulated signals.

The **PI-07P** probe works in the frequency range **100 MHz - 60 GHz**, covering most of the test requirements of MIL STD-464, RTCA-DO-160, FAA HIRF Rule & Advisory Circular 20-158, Boeing, Airbus and automotive EMC GM and Ford specifications.

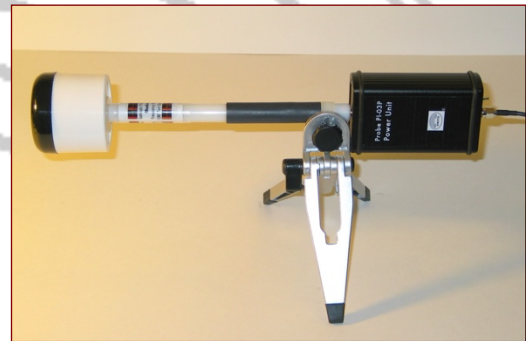
## Main Parameters\*

- Diode based 3-Axial isotropic sensor.
- Field strength range (Pulse): **150-3000 V/m.**
- Field Strength Range (Average) **4-900 V/m**
- Pulse duty cycle range: **0.01% to 10%.**
- Shortest pulse width: **1 us**
- Longest pulse repetition period: **10 ms**
- Error of duty cycle variation (E>300 V/m) **<1 dB**
- Linearity: **+/- 0.5 dB**
- Frequency response (no corr. factors):
  - 100 MHz-6 GHz **(+/- 3 dB)**
  - 6-18 GHz **(+/- 4 dB)**
  - 18-60 GHz **(+/- 6 dB)**
- Frequency response (with corr. factors): **+/- 3.0 dB**
- Rotational isotropicity: **<2 dB**
- Rechargeable battery operating time: **>60 hrs**
- Temperature: **5-40 °C**
- Humidity (non-condensing): **RH 10-90%**
- Temperature error: **0.05 dB/°C**
- **UK NPL traceable calibration.**
- Probe size (LxD): **12.0"x2.25" (310x58 mm)**
- Power Unit: (LxWxD): **4x2.3x1.3 (100x58x33 mm)**
- Weight (probe and power unit): **0.5 lb, 230 g**
- Operates with RFP-05M meter
- Designed and made in the **USA.**

\* *Specification may be changed to reflect the design progress.*



**Probe PI-07P**



**Probe PI-07P with PU-5P**



**Meter RFP-05M**

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