# SMP2

## Electromagnetic Field Meter

**3 INSTRUMENTS IN 1:**
Static feld measurement, Spectrum analysis & Broadband feld meter

**FFT-BASED TIME-DOMAIN**
Spectrum analysis

**EMF WORKER'S SAFETY**
EU Directive, FCC, SC6 (2015), etc.

**BROADBAND MEASUREMENT**
(0 Hz - 60 GHz)

**5G READY**
Ready for 5G monitoring

**Field probe range**
from 0 Hz to 60 GHz

**Spectrum analysis [FFT]**
(up to 400 kHz)

**Broadband measurements**
(0 Hz - 60 GHz)

**Field values:**
X, Y, Z and Total

**Graphical display**
in real time

**Dynamic menu**

**Weighted Peak Method (WPM)**
**Real time comparison with limits**

**> 1 million registers**
SQL data base

**Screenshot** function

**Fibre optics (optional)**

**USB**


Available field probes

E
100 kHz - 60 GHz
WPT
WPF3
WPF6/8
WPF18
WPF40/60

E H
1 Hz - 400 kHz
WP400
WP400-3
WP50

H
DC - 1 GHz
WPH-DC
WPH60
WPH1000


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Safety, Quality, Service

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## SMP2 Applications

Industry · Telecommunications · Powerline · Railway · Medical

Labs · Aeronautical · Worker's safety · Defense

### SMP2 included accessories:

- **"SMP2 Reader" PC software:** Compatible with Windows 7 or later versions.
- **SMP2 probes carrying case.**
- **USB cable.**
- **Charger.**

### SMP2 optional accessories:

- **Non-reflective wooden tripod** (including transport cover).
- **Internal embedded GPS.**
- **Fiber optics interface.**
- **Vehicle DC charger.**
- **SMP2 protective pouch.**
- **SMP2 probe extension cable.**

## Technical Specifications

| | | |
|---|---|---|
| **Versions** | **Broadband** | For broadband measurements using the following probes: WPFx, WPT, WP50, WPH60 and WPH1000. |
| | **Selective** | For frequency selective measurements from 0 to 400 kHz using WP400, WP400-3 and WPH-DC. |
| | **Dual** | For both kind of measurements using all field probes. |
| **Field probes** | | Automatic detection and recognition |
| **Broadband** | | 0 Hz – 60 GHz (depending on field probe) |
| **Spectrum analysis** | | up to 400 kHz |
| **Weighted Peak Method** | | 1 Hz – 400 kHz (Real time WPM for direct comparison with limits) |
| **Readout values** | | Total field (instantaneous, max., min. and average)<br>Field components (X, Y, Z) |
| **E Field units** | | V/m, kV/m, µW/cm$^2$ , mW/cm$^2$ , W/m$^2$ , % |
| **H Field units** | | nT, µT, mT, T, A/m, %, mG |
| **Log time** | | Configurable (from 0.5 s to 6 min) |
| **Average modes** | | Fixed o Sliding, according to international standards |
| **Average intervals** | | 10 s, 15 s, 30 s, 1 min, 2 min, 5 min, 6 min, 10 min, 15 min, 30 min |
| **Schedule measurement** | | Customized (up to 24 hours) |
| **Memory capacity** | | More than 1 million samples |
| **Data downloading** | | Mini-USB and Fibre Optics |
| **Firmware updating** | | Mini-USB |
| **Alarm** | | 2400 Hz audible signal (adjustable threshold) |
| **Display type** | | Color transmissive TFT (480 x 272 pixels) |
| **GPS (optional)** | | Built-in u-blox 7 (56 independent tracking channels) |
| **Battery** | | Internal rechargeable Li-ion |
| **Autonomy** | | > 14 hours (with broadband probes)<br>> 6 hours (with selective probes) |
| **Temperature range** | | -10 ºC to +50 ºC |
| **Size** | | 100 x 215 x 40 mm |
| **Weight** | | 575 g |

Product specifications and descriptions in this document subject to change without notice

SMP2_EN_1803_v1.3

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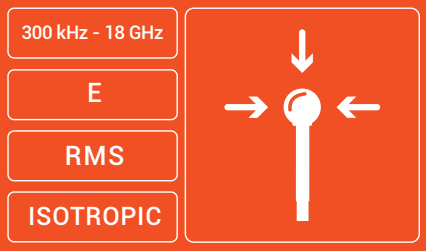
# **WPF18** Field Probe
# 300 kHz - 18 GHz

- **High sensitivity** from 0.5 V/m
- **Isotropic and RMS** measurement
- **Excellent attenuation** at 50/60 Hz
- **Meets international standards**




**Telecommunications**: certification and audit of telecommunication services (GSM, 3G, LTE, TDT, AM, FM, WiFi, etc.).

**Industry**: assessment of industrial processes for worker's exposure protection.

**Defence**: assessment of military sites and personnel exposure protection.

**Labs/R&D**: RF exposure protection of R&D and labs personnel.


## Technical Specifications

| | WPF18 | WPF18-HP<br>High Power version |
|---|---|---|
| **Frequency range** | 300 kHz - 18 GHz | |
| **Sensor type** | Isotropic<br>RMS diode technology | |
| **Type of frequency response** | Flat | |
| **Measurement range** | 0.5 - 250 V/m (CW)<br>0.5 - 30 V/m (RMS) | 0.5 – 1000 V/m (CW)<br>0.5 - 30 V/m (RMS) |
| **Dynamic range** | 54 dB | 66 dB |
| **Sensitivity** | 0.5 V/m | |
| **Resolution** | 0.1 V/m (from 10 V/m to 250 V/m) | |
| **Frequency response** | ± 2 dB (1 MHz – 5 GHz)<br>+ 0 / - 6 dB (5 GHz - 18 GHz) | |
| **Linearity** | ± 0.5 dB (1 V/m - 150 V/m) | |
| **Isotropic deviation** | ± 1.2 dB (up to 10 GHz)<br>± 3 dB (10 GHz - 18 GHz) | |
| **Calibration** | ISO 17025 accredited calibration (ILAC) | |
| **Calibration period** | 24 months (recommended) | |
| **Temperature range** | - 20 ºC to 50 ºC | |
| **Temperature response** | + 0.1/ - 1 dB (related to 20 ºC) | |
| **Dimensions** | 28.4 cm x 6 cm Ø | |
| **Weight** | 95 g | |
| **Attenuation at 50/60 Hz** | > 60 dB | |

(*) The frequency response can be corrected with the SMP2 by using the correction factors stored in the probe (ISO 17025 accredited calibration).


## Compatible with SMP2, MonitEM, MapEM

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WPF18_EN_1811_v1.2

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