

# SMP2



## Electromagnetic Field Meter



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



**FFT-BASED TIME-DOMAIN**  
Spectrum analysis (up to 400 kHz)



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



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



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

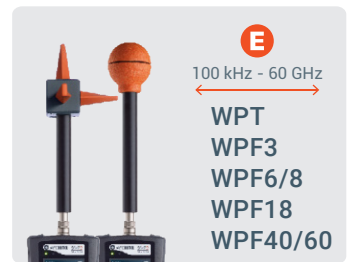
**> 1 million registers**  
SQL data base

**Screenshot function**

**Fibre optics (optional)**

**USB**

Available field probes



# SMP2 Applications



Industry



Telecommunications



Powerline



Railway



Medical



Labs



Aeronautical



Worker's safety



Defense



## 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) Field components (X, Y, Z)	
E Field units	V/m, kV/m, $\mu\text{W}/\text{cm}^2$ , $\text{mW}/\text{cm}^2$ , $\text{W}/\text{m}^2$ , %	
H Field units	nT, $\mu\text{T}$ , mT, T, A/m, %, mG, G	
Log time	Configurable (from 0.5 s to 6 min)	
Average modes	Fixed or 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	> 24 hours	
Temperature range	-10 °C to +50 °C	
Size	100 x 215 x 40 mm	
Versions	Broadband	560 g
	Selective	635 g
	Dual	635 g

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

### SMP2 included accessories:

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

### SMP2 optional accessories:

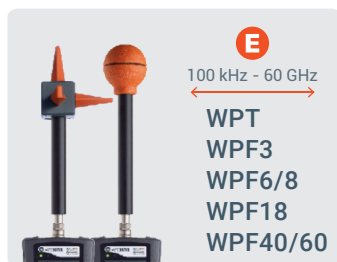
- › Non-reflective wooden tripod (including transport cover).
- › Internal embedded GPS.
- › Fiber optics interface.
- › Vehicle DC charger.
- › SMP2 protective pouch.
- › SMP2 probe extension cable.

# SMP2

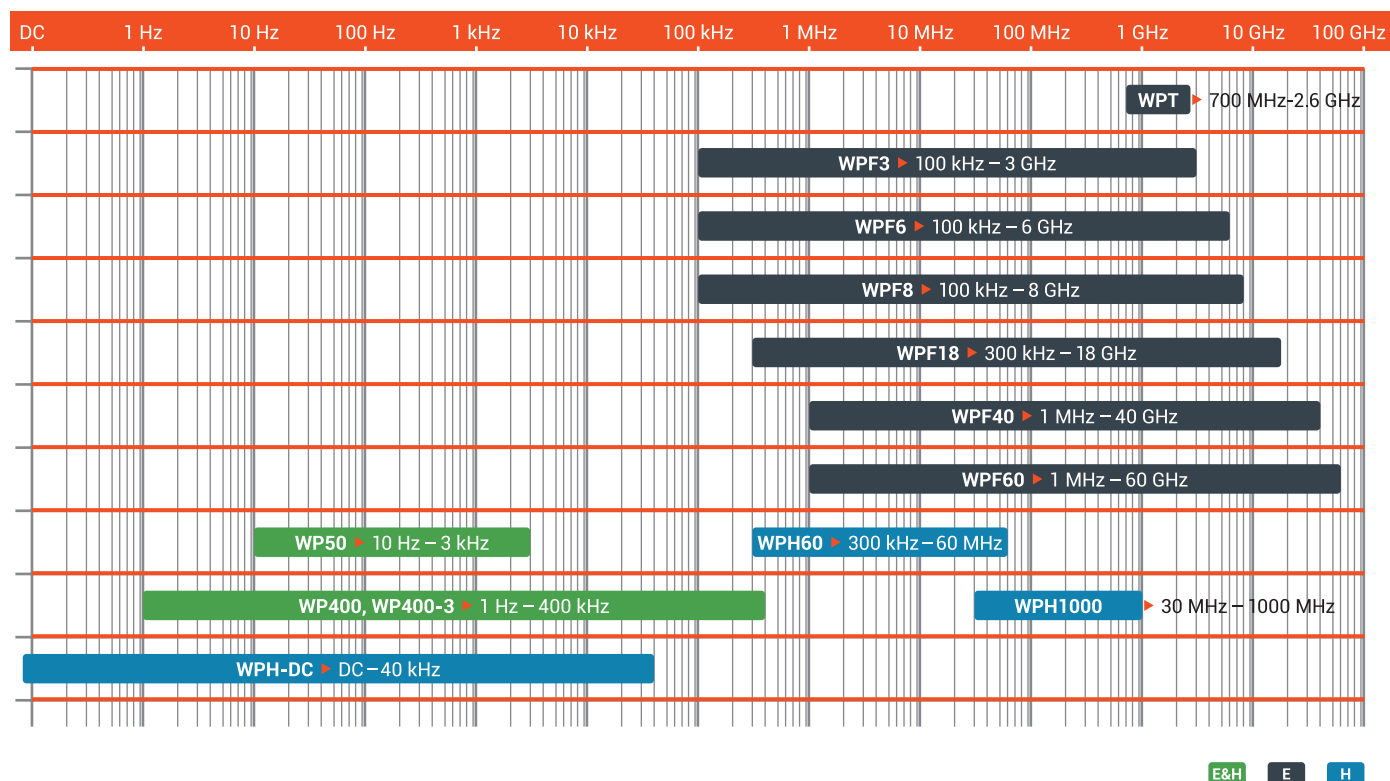
## Electromagnetic Field Meter. Compatible field probes

Wavecontrol provides a full range of E-Field, H-Field and E&H Field probes covering different frequency ranges starting at 10 Hz and up to 60 GHz.

Probes are plug and play and come with an individual ISO 17025 accredited calibration. All sensors are isotropic, RMS and highly accurate.



## Frequency range of compatible field probes



E&H E H

Model	Frequency range	Measurement range	Linearity	Size
<b>WPH-DC Selective &amp; Broadband</b>	0 – 40 kHz	H-Field: 10 $\mu$ T – 10 T	-	27.3 x 2.1 cm $\emptyset$ Sensor stick 0.94 cm $\emptyset$
<b>WP400-3 Selective &amp; Broadband</b>	1 Hz – 400 kHz	E-Field: 10 V/m – 400 kV/m H-Field: 200 nT - 50mT*	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	27.5 x 3.3 cm $\emptyset$
<b>WP400c Selective &amp; Broadband</b>	1 Hz – 400 kHz	E-Field: 4mV/m – 100 kV/m H-Field: 0.5 nT – 40 mT*	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	28 cm x 12.8 cm $\emptyset$
<b>WP50</b>	10 Hz – 3 kHz	E-Field: 2.5 V/m – 20,000 V/m H-Field: 0.05 $\mu$ T – 2,000 $\mu$ T	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	27 cm x 11.5 cm $\emptyset$
<b>WPH60</b>	300 kHz – 60 MHz	H-Field: 0.018 – 1 A/m (RMS) 0.018 – 20 A/m (CW)	$\pm$ 1 dB (0.04 – 4 A/m)	27 cm x 9 cm $\emptyset$
<b>WPH1000</b>	30 MHz – 1,000 MHz	H-Field: 0.018 – 20 A/m	$\pm$ 1 dB (0.04 – 4 A/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF3</b>	100 kHz – 3 GHz	E-Field: 0.2 – 20 V/m (RMS) 0.2 – 130 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF3-HP</b>		E-Field: 0.2 – 20 V/m (RMS) 0.2 – 1,000 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF6</b>	100 kHz – 6 GHz	E-Field: 0.2 – 20 V/m (RMS) 0.2 – 130 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF6-HP</b>		E-Field: 0.2 – 20 V/m (RMS) 0.2 – 1,000 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF8</b>	100 kHz – 8 GHz	E-Field: 0.3 – 20 V/m (RMS) 0.3 – 130 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF8-HP</b>		E-Field: 0.3 – 20 V/m (RMS) 0.3 – 1,000 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF18</b>	100 kHz – 18 GHz	E-Field: 0.5 – 30 V/m (RMS) 0.5 – 250 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF18-HP</b>		E-Field: 0.5 – 30 V/m (RMS) 0.5 – 1,000 V/m (CW)	$\pm$ 0.5 dB (0.5 – 100 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF40</b>	1MHz – 40GHz	E-Field: 1 – 55V/m (RMS) 1 – 1,000 V/m (CW)	$\pm$ 2 dB (1 – 2 V/m)) $\pm$ 1 dB (2 – 250 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPF60</b>	1MHz – 60GHz	E-Field: 1 – 55V/m (RMS) 1 – 1,000 V/m (CW)	$\pm$ 2 dB (1 – 2 V/m)) $\pm$ 1 dB (2 – 250 V/m)	28.4 cm x 6 cm $\emptyset$
<b>WPT</b>	Selective: 700-900, 1800-1900, 2100, 2600 Hz	E-Field: 0.04 – 65 V/m	$\leq$ $\pm$ 0.4 dB (0.2 – 50 V/m)	28.5 x 10.5 x 10.5 cm
<b>WP-WIFI</b>	WiFi 2.45 GHz	E-Field: 0.04 – 65 V/m (RMS)	$\leq$ $\pm$ 0.5 dB (0.2 – 50 V/m)	28.5 x 10.5 x 10.5 cm

For more probe information, please contact us.