

SMP2



Electromagnetic field meter



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



FFT-BASED TIME-DOMAIN SPECTRUM ANALYSIS
From 1 Hz to 400 kHz



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



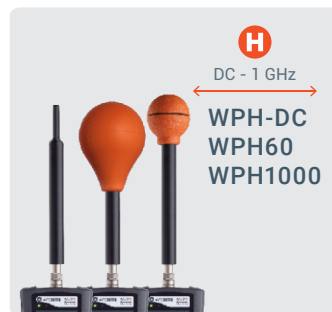
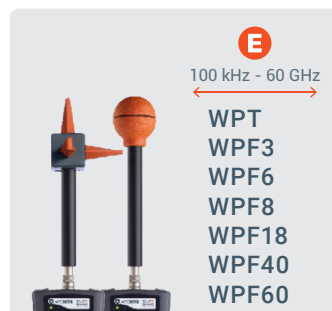
BROADBAND MEASUREMENT
(0 Hz - 60 GHz)



Ready for 5G
measurements



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, WP400c 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, $\mu\text{W}/\text{cm}^2$, mW/cm^2 , W/m^2 , %
H Field units		nT, μT , 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 (3.9 x 8.4 x 1.5 ")
Versions	Broadband	560 g (19.7 oz.)
	Selective	635 g (22.4 oz.)
	Dual	635 g (22.4 oz.)

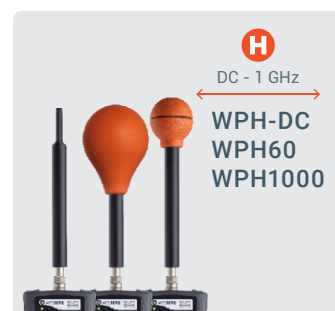
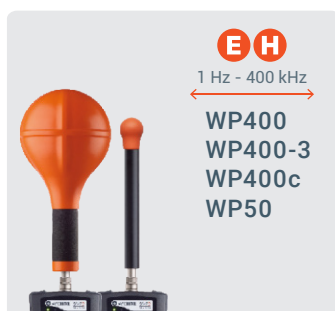
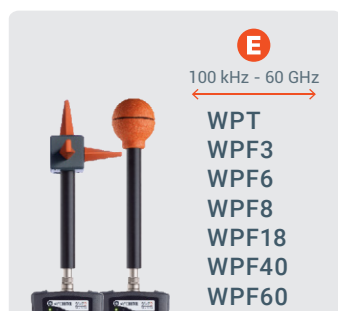
Product specifications and descriptions in this document subject to change without notice

SMP2

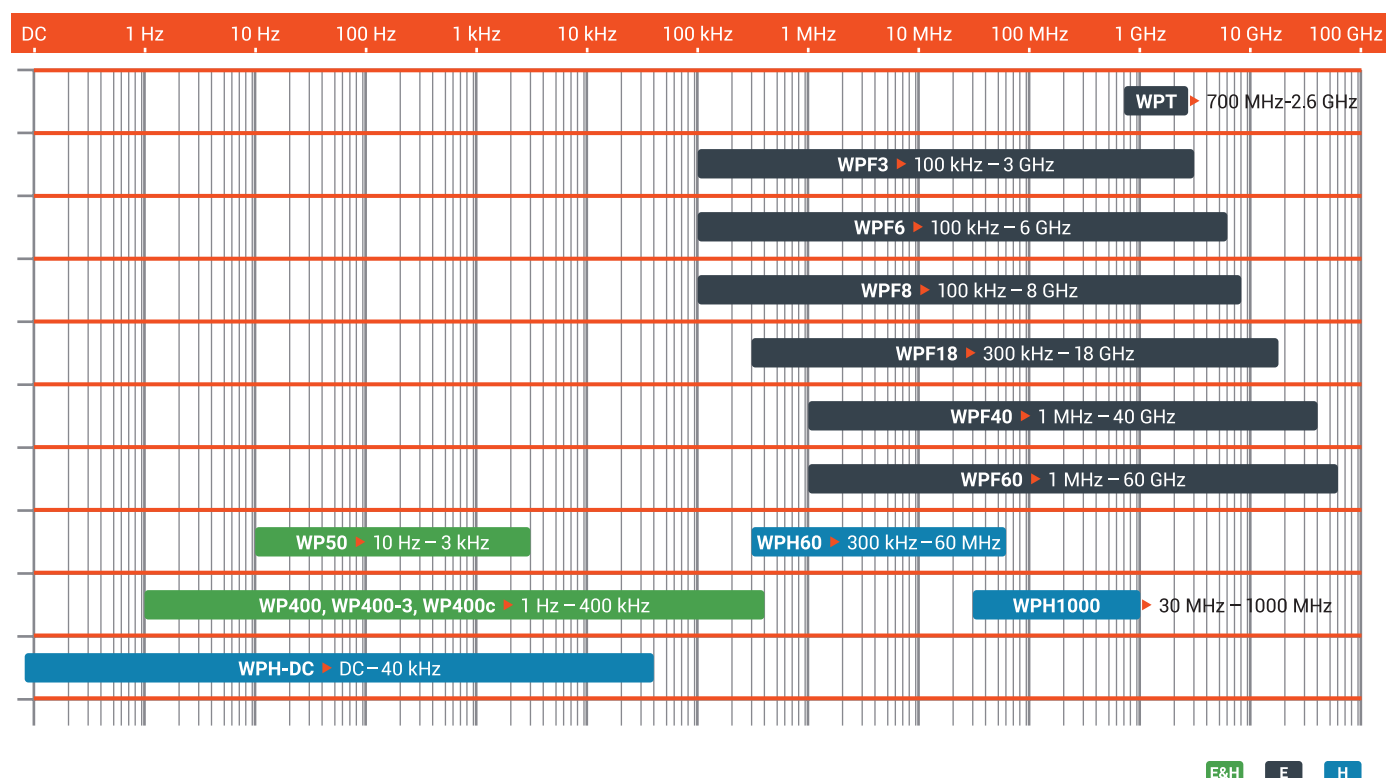
Electromagnetic field meter. Compatible field probes

Wavecontrol provides a full range of E-Field, H-Field and E&H Field probes covering different frequency ranges starting at 0 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



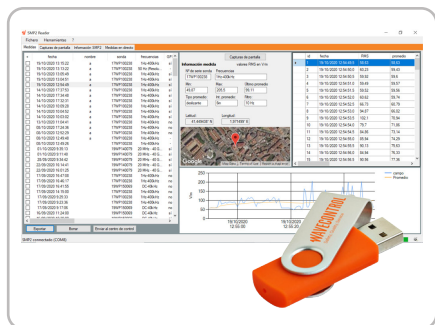
Model	Frequency range	Response	Measurement range	Linearity	Size
WPH-DC Selective & Broadband	0 – 40 kHz	Flat / Shaped (Weighted Peak Method)	H-Field: 10 μ T – 10 T	0.6% (100 μ T – 1 T) 1% (100 μ T – 2.4 T)	27.3 cm x 2.1 cm $\varnothing$ 10.8 " x 0.8 " $\varnothing$ Sensor stick: 0.94 cm $\varnothing$ 0,37 " $\varnothing$
WP400 Selective & Broadband	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field: 1 V/m – 100 kV/m H-Field: 50 nT – 10 mT	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	28 cm x 12.8 cm $\varnothing$ 11 " x 5 " $\varnothing$
WP400-3 Selective & Broadband	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field: 10 V/m – 400 kV/m H-Field: 200 nT – 50 mT	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	27.5 x 3.3 cm $\varnothing$ 10.8 " x 1.3 " $\varnothing$
WP400c Selective & Broadband	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field: 4 V/m – 100 kV/m H-Field: 0.5 nT – 40 mT	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	28 cm x 12.8 cm $\varnothing$ 11 " x 5 " $\varnothing$
WP50	10 Hz – 3 kHz	Flat	E-Field: 2.5 V/m – 20,000 V/m H-Field: 0.05 μ T – 2,000 μ T	$\pm$ 1% (Typical) $\pm$ 2% (Maximum)	27 cm x 11.5 cm $\varnothing$ 10.6 " x 4.5 " $\varnothing$
WPH60	300 kHz – 60 MHz	Flat	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 $\varnothing$ 10.6 " x 3.5 " $\varnothing$
WPH1000	30 MHz – 1,000 MHz	Flat	H-Field: 0.018 – 20 A/m	$\pm$ 1 dB (0.04 – 4 A/m)	28.4 cm x 6 cm $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF3	100 kHz – 3 GHz	Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF3-HP		Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF6	100 kHz – 6 GHz	Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF6-HP		Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF8	100 kHz – 8 GHz	Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF8-HP		Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF18	100 kHz – 18 GHz	Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF18-HP		Flat	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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF40	1MHz – 40 GHz	Flat	E-Field: 1 – 55 V/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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF60	1MHz – 60 GHz	Flat	E-Field: 1 – 55 V/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 $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPF60S	1MHz – 60 GHz	Shaped (ICNIRP 1998/2020, FCC)	E-Field: 0.1% – 35% (RMS) 0.1 – 800% (CW)	$\pm$ 2 dB (1 – 2 V/m) $\pm$ 1 dB (2 – 250 V/m)	28.4 cm x 6 cm $\varnothing$ 11.2 " x 2.4 " $\varnothing$
WPT	Selective: 700 – 900, 1800 – 1900, 2100, 2600 Hz	Flat	E-Field: 0.04 – 65 V/m (RMS)	$\leq$ 0.4 dB (0.2 – 50 V/m)	28.5 x 10.5 x 10.5 cm 11.2 x 4.1 x 4.1 "
WP-WIFI	WiFi 2.45 GHz	Flat	E-Field: 0.04 – 65 V/m (RMS)	$\leq$ 0.5 dB (0.2 – 50 V/m)	28.5 x 10.5 x 10.5 cm 11.2 x 4.1 x 4.1 "

Visit www.wavecontrol.com/rfsafety/en/products/probes, for detailed datasheets of each field probe model.

SMP2

Electromagnetic field meter. Accessories

SMP2 included accessories:



'SMP2 Reader' PC software
Included / Downloadable from wavecontrol.com

Compatible with Windows 7 or later versions.



SMP2 carrying case
Part # WSN0001-2-3

Robust case to fit the SMP2 and up to 5 probes.



USB cable

USB to mini-USB
cable.



AC/DC charger

International plug
types available.

SMP2 optional accessories:



Non-reflective wooden tripod
Part # WSNA0001

Including transport cover.



Tripod extension
Part # WSNA0002

Horizontal extension for LF vertical E-field
measurements.



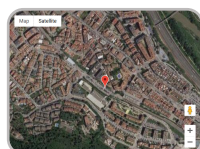
**Probe support for
tripod**
Part # WSNA0013

Recommended with
the probe extension
cable.



**Probe extension
cable**
Part # WSNA0011

5-meter extension
cable.



GPS
Part # WSNO0001

Internal embedded
GPS.



**Fiber optics
interface**
Part # WSNA0004

10-meter fiber optics
+ Converter USB
to PC.



**Vehicle DC
charger**
Part # WSNA0007

Charge SMP2
from a vehicle DC
connector.



**SMP2 protective
pouch**
Part # WSNA0005

Easily portable
protective soft
sheath.



SMP2 backpack
Part # WSNA0008

Soft backpack to fit up to 3 probes.