



SMP3



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 10 MHz



DIGITAL OUTPUT
For real time external measurements



Ready for 5G measurements



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



BROADBAND MEASUREMENT
(0 Hz - 60 GHz)



Field probe range
from 0 Hz to 60 GHz

Spectrum analysis [FFT]
(up to 10 MHz)

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-C
Digital Output

Available field probes

E
100 kHz - 60 GHz

- WPT
- WPF3
- WPF6
- WPF8
- WPF18
- WPF40
- WPF60/60s

E H
1 Hz - 10 MHz

- WP400
- WP400c
- WP400-3
- WP400-3H
- WP50
- WP10M

H
DC - 1 GHz

- WPH-DC
- WPH60
- WPH1000

SMP3 Applications



Industry



Telecommunications



Energy



Railway



Medical



Labs



Aeronautical



Worker's safety



Defense



Automotive



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 10 MHz using WP400, WP400c, WP400-3, WP10M and WPH-DC.
	Dual	For both kinds 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 10 MHz	
Weighted Peak Method	1 Hz – 10 MHz (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	USB-C and fibre optics	
Firmware updating	USB-C	
Alarm	2400 Hz audible signal (adjustable threshold)	
Display type	Color transmissive TFT (480 x 272 pixels)	
GPS (optional)	Built-in u-blox 8 (56 independent tracking channels)	
Digital Output	Probe direct output // Digital output through USB-C for WP400 family probes	
Battery	Internal rechargeable Li-ion	
Autonomy	> 24 hours	
Temperature range	-10 °C to +50 °C	
Humidity	5% to 95%, non-condensing	
Size	100 x 215 x 40 mm (3.9 x 8.4 x 1.5 ")	
Weight	Broadband	560 g (19.7 oz.)
	Selective	635 g (22.4 oz.)
	Dual	635 g (22.4 oz.)

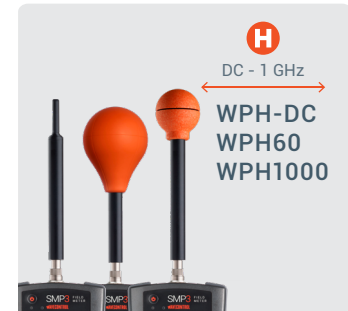
Product specifications and descriptions in this document subject to change without notice

SMP3

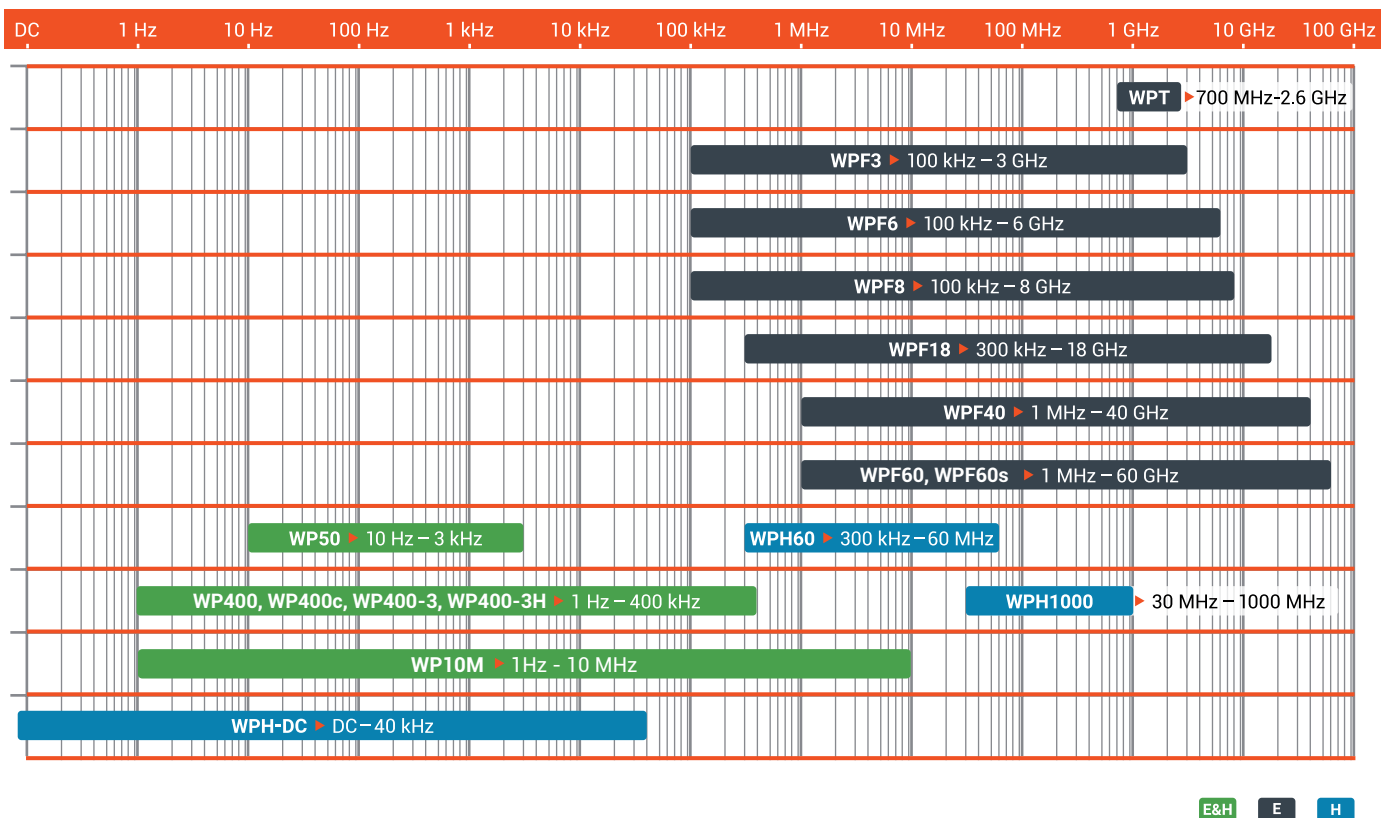
Electromagnetic field meter. Compatible field probes

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	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 \emptyset 10.8 " x 0.8 " \emptyset Sensor stick: 0.94 cm \emptyset 0,37 " \emptyset
WP400 Selective & Broadband	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field: 1 V/m – 100 kV/m H-Field: 50 nT – 30 mT @50 Hz 50 nT – 10 mT (100 Hz – 10 kHz)*	\pm 1% (Typical) \pm 2% (Maximum)	28 cm x 12.8 cm \emptyset 11 " x 5 " \emptyset
WP400c Selective & Broadband	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field: 1 V/m – 100 kV/m H-Field: 50 nT – 30 mT @50 Hz 50 nT – 1.5 mT (820 Hz – 40 kHz)*	\pm 1% (Typical) \pm 2% (Maximum)	28 cm x 12.8 cm \emptyset 11 " x 5 " \emptyset
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 (100 Hz – 10 kHz)*	\pm 1% (Typical) \pm 2% (Maximum)	27.5 x 3.3 cm \emptyset 10.8 " x 1.3 " \emptyset
WP10M Selective & Broadband	1 Hz - 10 MHz	Flat / Shaped (Weighted Peak Method)	E-Field: 2 V/m - 100 kV/m 2 V/m - 47 kV/m (160 kHz-10 MHz) H Field: 100 nT - 47 mT @50 Hz 400 nT - 4,7 mT (500 Hz - 10 MHz)	+/- 1% (Typical) +/- 2% (Maximum)	28 cm x 12.8 cm \emptyset 11" x 5" \emptyset
WP50	10 Hz – 3 kHz	Flat / Shaped	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 \emptyset 10.6 " x 4.5 " \emptyset
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 \emptyset 10.6 " x 3.5 " \emptyset
WPH1000	30 MHz – 1000 MHz	Flat	H-Field: 0.018 – 20 A/m	\pm 1 dB (0.04 – 4 A/m)	28.4 cm x 6 cm \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
WPF8	100 kHz – 8 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 \emptyset 11.2 " x 2.4 " \emptyset
WPF8-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 \emptyset 11.2 " x 2.4 " \emptyset
WPF18	300 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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
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 \emptyset 11.2 " x 2.4 " \emptyset
WPT	Selective: 700 – 900, 1800 – 1900, 2100, 2600 MHz	Flat	E-Field: 0.04 – 65 V/m (RMS)	$<$ \pm 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)	$<$ \pm 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 "

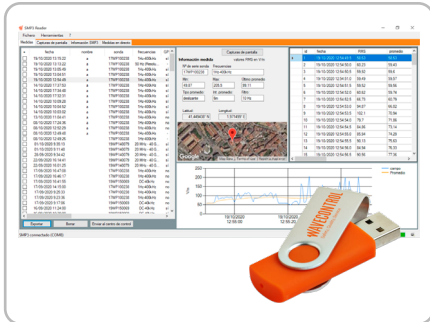
*Below and above the stated frequency range, upper limit of the measurement range changes (See datasheets for more information).

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

SMP3

Electromagnetic field meter. Accessories

SMP3 included accessories



'SMP3 Reader' PC software
Included / Downloadable from wavecontrol.com

Compatible with Windows 7 or later versions



SMP3 carrying case
Part # WSN0001-2-3

Robust case to fit the SMP3 and up to 5 probes



USB cable

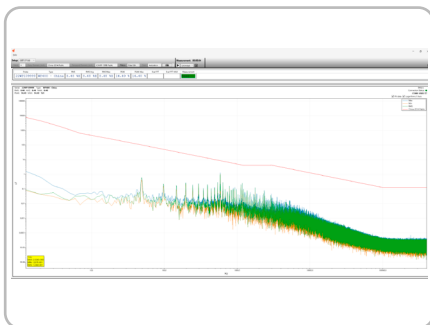
USB to USB-C cable



AC/DC charger

International plug types available

SMP3 optional accessories



SMP3-Streamer option
Part # W-SMP3-STREAMER

Advanced real time processing and multi-probe use



Non-reflective wooden tripod
Part # WSNA0001

Including transport cover



Tripod extension
Part # WSNA0002

Horizontal extension for LF vertical E-field measurements



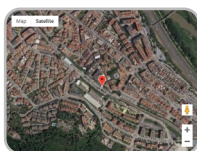
Probe support for tripod
Part # WSNA0013

Recommended with the probe extension cable



Probe extension cable
Part # WSNA0011 and #WSNA0014

2 or 5 meters extension cable



GPS
Part # WSNO0001

Internal embedded GPS



Fibre optics interface
Part # WSNA0004, WSNA0010, and WSNA0015

10, 20, or 45 meters fibre optics + USB converter to PC



Vehicle DC charger
Part # WSNA0007

Charge SMP3 from a vehicle DC connector



SMP3 protective pouch
Part # WSNA0009

Easily portable protective soft sheath



SMP3 backpack
Part # WSNA0008

Soft backpack to fit up to 3 probes