

# SMP3

## Electromagnetic field meter

3X1

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



FFT-BASED TIME-DOMAIN  
SPECTRUM ANALYSIS  
from 1 Hz to 10 MHz

101

DIGITAL OUTPUT  
For real time external  
measurements



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



BROADBAND MEASUREMENT  
(0 Hz - 90 GHz)

5G  
READY

Ready for 5G  
measurements

Field probe range  
from 0 Hz to 60 GHz

Spectrum analysis [FFT]  
(up to 10 MHz)

Broadband measurements  
(0 Hz - 90 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

WP3  
WP6  
WP8  
WP18  
WP40  
WP60/60s

E H

1 Hz - 10 MHz

WP400  
WP400c  
WP400-3  
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

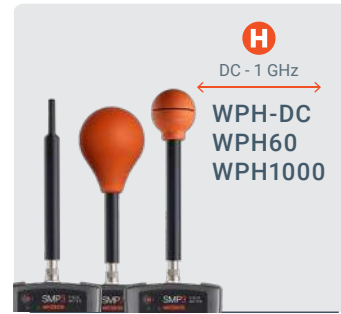
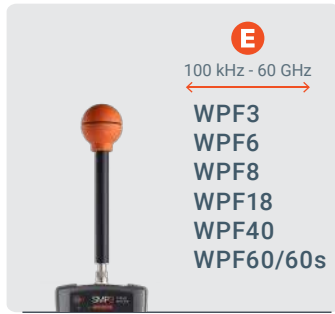
	Broadband	Selective	Dual
<b>Part Number</b>	WSL0001	WSL0003	WSL0002
<b>Applications</b>	For broadband measurements using the following probes: WPF3, WPF6, WPF8, WPF18, WPF40, WPF60, WPF60S, WP50, WPH60 and WPH1000.	For frequency selective measurements from 0 to 10 MHz using WP400, WP400c, WP400-3, WP10M and WPH-DC	For both kinds of measurements using all field probes.
<b>Field probes</b>	Automatic detection and recognition		
<b>Broadband</b>	0 Hz – 90 GHz (depending on field probe)		
<b>Spectrum analysis</b>	up to 10 MHz		
<b>Weighted Peak Method</b>	1 Hz – 10 MHz (Real time WPM for direct comparison with limits)		
<b>Readout values</b>	Total field (instantaneous, max., min. and average) Field components (X, Y, Z)		
<b>E Field units</b>	V/m, kV/m, $\mu\text{W}/\text{cm}^2$ , $\text{mW}/\text{cm}^2$ , $\text{W}/\text{m}^2$ , %		
<b>H Field units</b>	nT, $\mu\text{T}$ , mT, T, A/m, %, mG, G		
<b>Log time</b>	Configurable (from 0.5 s to 6 min)		
<b>Average modes</b>	Fixed or Sliding, according to international standards		
<b>Average intervals</b>	10 s, 15 s, 30 s, 1 min, 2 min, 5 min, 6 min, 10 min, 15 min, 30 min		
<b>Schedule measurement</b>	Customized (up to 24 hours)		
<b>Memory capacity</b>	More than 1 million samples		
<b>Data downloading</b>	USB-C and fibre optics		
<b>Firmware updating</b>	USB-C		
<b>Alarm</b>	2400 Hz audible signal (adjustable threshold)		
<b>Display type</b>	Color transmissive TFT (480 x 272 pixels)		
<b>GPS (optional)</b>	Built-in u-blox 8 (56 independent tracking channels)		
<b>Digital Output</b>	Probe direct output // Digital output through USB-C for WP400 family probes		
<b>Battery</b>	Internal rechargeable Li-ion		
<b>Autonomy</b>	> 24 hours		
<b>Temperature range</b>	-10 °C to +50 °C		
<b>Humidity</b>	5% to 95%, non-condensing		
<b>Size</b>	100 x 215 x 40 mm (3.9 x 8.4 x 1.5")		
<b>Weight</b>	560 g (19.7 oz.)	635 g (22.4 oz.)	635 g (22.4 oz.)

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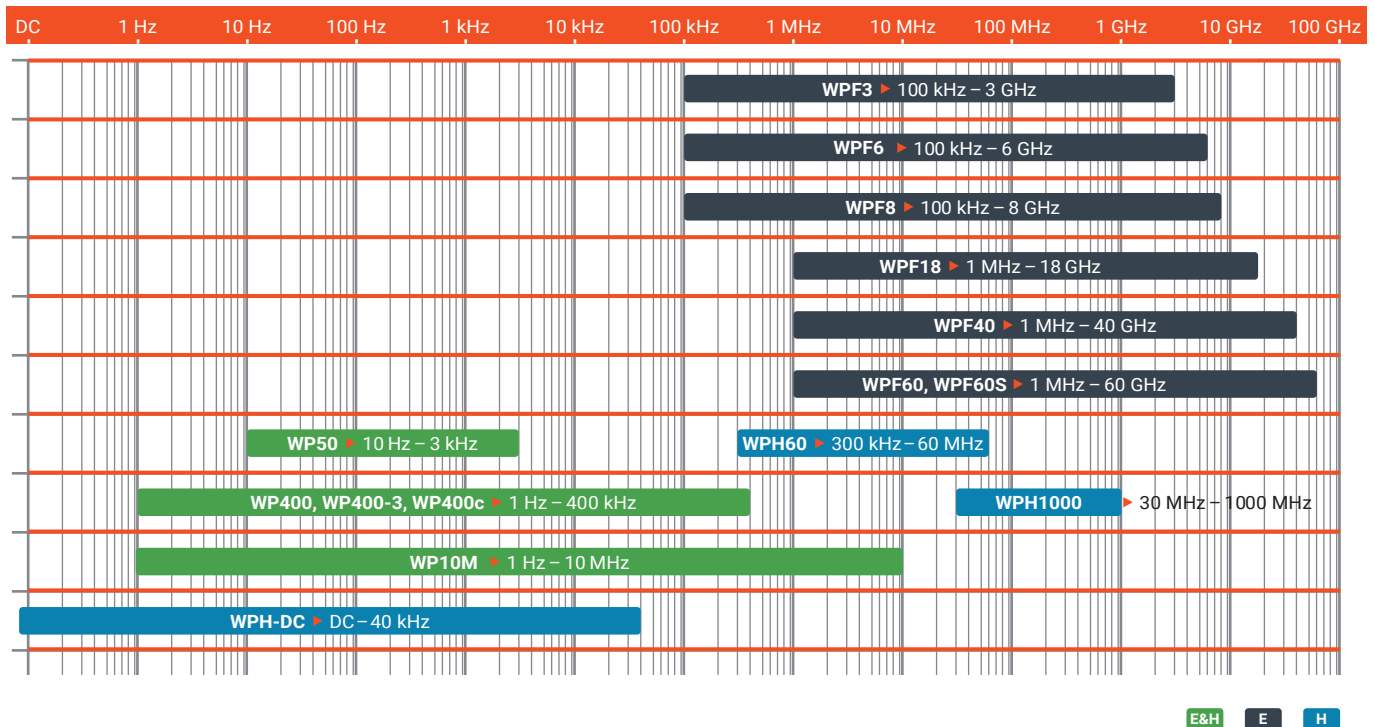
## Electromagnetic field meter. Compatible field probes

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



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Model	Type	Part Number	Frequency range	Response	Measurement range
WPH-DC	Selective & Broadband	WWP1501	0 – 40 kHz	Flat	H-Field: 10 $\mu$ T – 10 T
WP400	Selective & Broadband	WWP1001	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)*
WP400c	Selective & Broadband	WWP1002	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)*
WP400-3	Selective & Broadband	WWP1201	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)*
WP10M	Selective & Broadband	WWP2401	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)
WP50	Broadband	WWP0501	10 Hz – 3 kHz	Flat / Shaped	E-Field: 2.5 V/m – 20,000 V/m H-Field: 0.05 $\mu$ T – 2,000 $\mu$ T
WPH60	Broadband	WWP1101	300 kHz – 60 MHz	Flat	H-Field: 0.018 – 20 A/m (CW) 0.018 – 1 A/m (RMS)
WPH1000	Broadband	WWP1301	30 – 1000 MHz	Flat	H-Field: 0.018 – 20 A/m
WPF3	Broadband	WWP0301	100 kHz – 3 GHz	Flat	E-Field: 0.2 – 130 V/m (CW) 0.2 – 20 V/m (RMS)
WPF3-HP	Broadband	WWP0302		Flat	E-Field: 0.2 – 1,000 V/m (CW) 0.2 – 20 V/m (RMS)
WPF6	Broadband	WWP0601	100 kHz – 6 GHz	Flat	E-Field: 0.2 – 130 V/m (CW) 0.2 – 20 V/m (RMS)
WPF6-HP	Broadband	WWP0602		Flat	E-Field: 0.2 – 1,000 V/m (CW) 0.2 – 20 V/m (RMS)
WPF8	Broadband	WWP0401	100 kHz – 8 GHz	Flat	E-Field: 0.2 – 130 V/m (CW) 0.2 – 20 V/m (RMS)
WPF8-HP	Broadband	WWP0402		Flat	E-Field: 0.2 – 1,000 V/m (CW) 0.2 – 20 V/m (RMS)
WPF18	Broadband	WWP0903	1 MHz – 18 GHz	Flat	E-Field: 0.5 – 1000 V/m (CW) 0.5 – 50 V/m (RMS)
WPF18 Fast	Broadband	WWP0913		Flat	E-Field: 0.5 – 1000 V/m (CW) 0.5 – 50 V/m (RMS)
WPF40	Broadband	WWP1401	1MHz – 40 GHz	Flat	E-Field: 1 – 1,000 V/m (CW) 1 – 55 V/m (RMS)
WPF40 Fast	Broadband	WWP1402		Flat	E-Field: 1 – 1,000 V/m (CW) 1 – 55 V/m (RMS)
WPF60	Broadband	WWP2301	1MHz – 60 GHz	Flat	E-Field: 1 – 1,000 V/m (CW) 1 – 55 V/m (RMS)
WPF60 Fast	Broadband	WWP2311		Flat	
WPF60S	Broadband	WWP2201	1MHz – 60 GHz	Shaped FCC	E-Field: 0.1% – 800% (CW) 0.1% – 35% (RMS)
		WWP2202		Shaped ICNIRP 1998/2020	
		WWP2203		Shaped SC6	

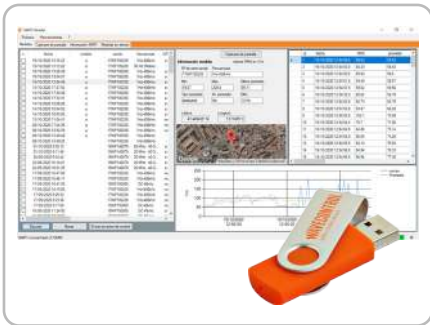
\*Below and above the stated frequency range, upper limit of the measurement range changes (See datasheets for more information).

Visit [www.wavecontrol.com/rfsafety/en/products/probes](http://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](http://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**

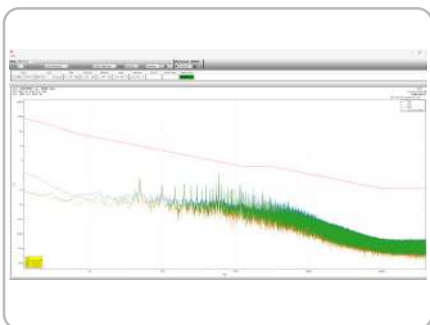
USB to USB-C cable



**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 (5 m.) and # WSNA0014 (2 m.)

Extension cable



**GPS**  
Part # WSN00001

Internal embedded GPS



**Fibre optics interface**  
Part # WSNA0004 (10 m.), WSNA0010 (20 m.), and WSNA0015 (45 m.)

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