

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 90 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 - 90 GHz



WP3
WP6
WP8
WP18
WP40
WP60/60s
WP90

E H

1 Hz - 10 MHz



WP400
WP400c
WP400-3
WP50
WP10M

H

DC - 1 GHz



WPH-DC
WPH60
WPH1000

WAVECONTROL

Safety, Quality, Service

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

SMP3 Applications



INDUSTRY



TELECOMMUNICATIONS



ENERGY



RAILWAY



MEDICAL



LABS



AERONAUTICAL



WORKER'S
SAFETY



DEFENSE



AUTOMOTIVE



Technical specifications

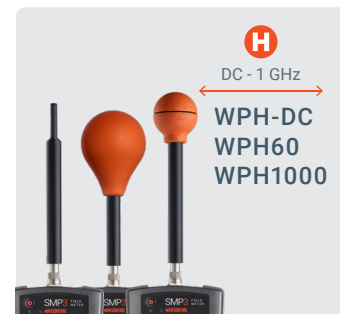
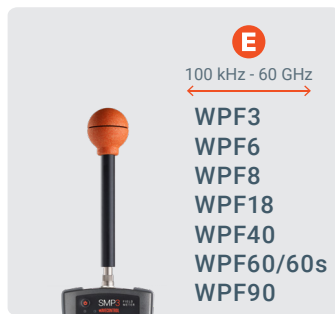
	Broadband	Selective	Dual
Part Number	WSL0001	WSL0003	WSL0002
Applications	For broadband measurements using the following probes: WPF3, WPF6, WPF8, WPF18, WPF40, WPF60, WPF60S, WPF90, WP50, WPH60 and WPH1000.	For frequency selective measurements from 0 to 10 MHz using WP400, WP400c, WP400-3, WP10M and WPH-DC.	For both kinds of measurements using all field probes.
Field probes	Automatic detection and recognition		
Broadband	0 Hz – 90 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	560 g (19.7 oz.)	635 g (22.4 oz.)	635 g (22.4 oz.)

SMP3

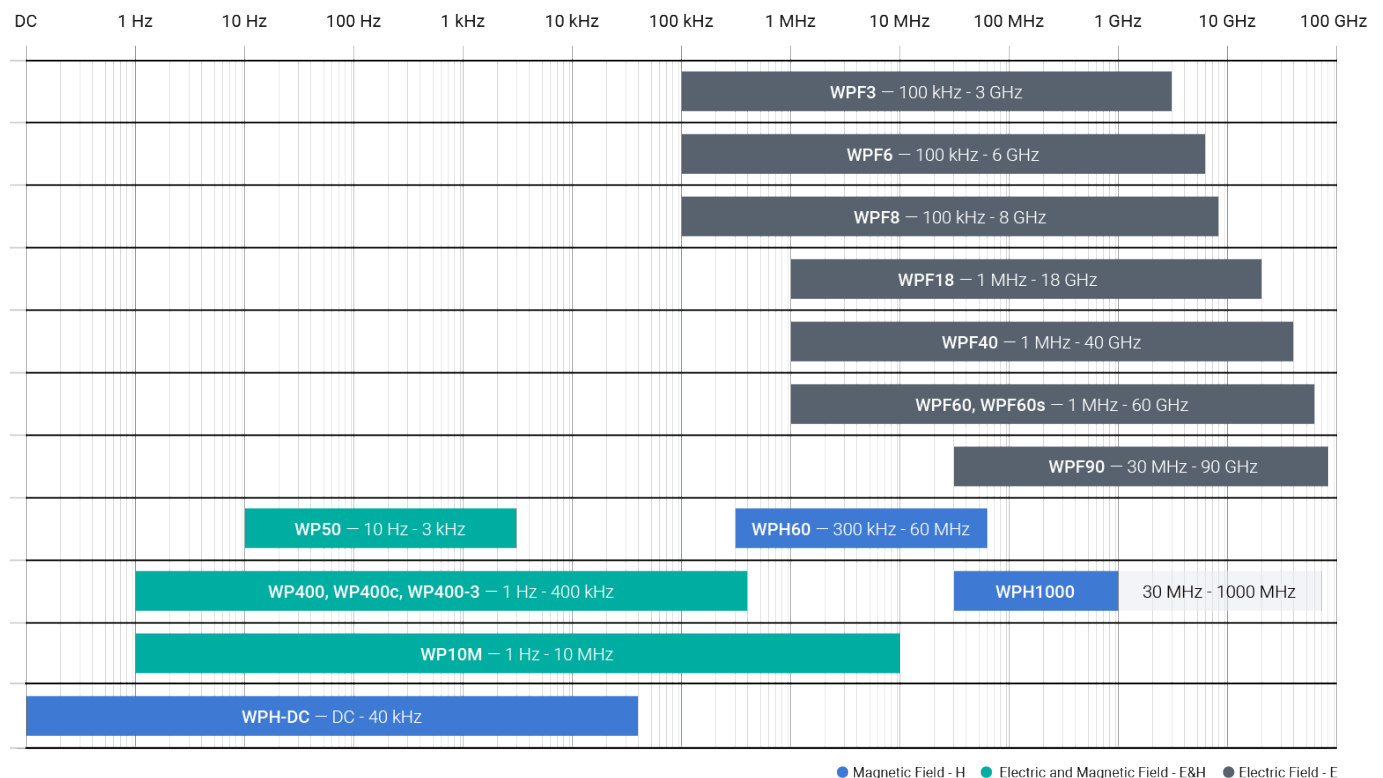
Electromagnetic field meter. Compatible field probes

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 90 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





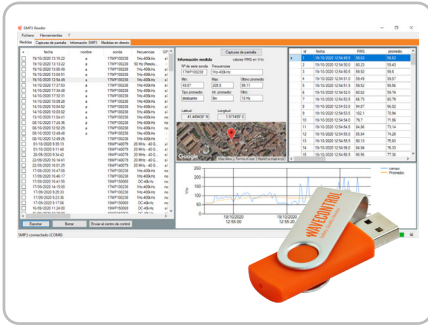
Model	Type	Part Number	Frequency Range	Response	Measurement range	
WPH-DC	Selective & Broadband	WWP1501	0 – 40 kHz	Flat	H-Field:	10 μ T – 10 T
WP400	Selective & Broadband	WWP1001	1 Hz – 400 kHz	Flat / Shaped (Weighted Peak Method)	E-Field:	1 V/m – 100 kV/m
					H-Field:	50 nT – 30 mT @50 Hz 50 nT – 10 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 μ T – 2,000 μ T
WPH60	Broadband	WWP1101	300 kHz – 60 MHz	Flat	H-Field:	0.018 – 1 A/m (RMS) 0.018 – 20 A/m (CW)
WPH1000	Broadband	WWP1301	30 MHz – 1000 MHz	Flat	H-Field:	0.018 – 20 A/m
WPF3	Broadband	WWP0301	100 kHz – 3 GHz	Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 130 V/m (CW)
WPF3-HP	Broadband	WWP0302		Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 1,000 V/m (CW)
WPF6	Broadband	WWP0601	100 kHz – 6 GHz	Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 130 V/m (CW)
WPF6-HP	Broadband	WWP0602		Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 1,000 V/m (CW)
WPF8	Broadband	WWP0401	100 kHz – 8 GHz	Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 130 V/m (CW)
WPF8-HP	Broadband	WWP0402		Flat	E-Field:	0.2 – 20 V/m (RMS) 0.2 – 1,000 V/m (CW)
WPF18	Broadband	WWP0903	1 MHz – 18 GHz	Flat	E-Field:	0.5 – 30 V/m (RMS) 0.5 – 250 V/m (CW)
WPF18 Fast	Broadband	WWP0913		Flat	E-Field:	0.5 – 30 V/m (RMS) 0.5 – 1,000 V/m (CW)
WPF40	Broadband	WWP1401	1 MHz – 40 GHz	Flat	E-Field:	1 – 55 V/m (RMS) 1 – 1,000 V/m (CW)
WPF40 Fast	Broadband	WWP1402		Flat		
WPF60	Broadband	WWP2301	1 MHz – 60 GHz	Flat	E-Field:	1 – 55 V/m (RMS) 1 – 1,000 V/m (CW)
WPF60 Fast	Broadband	WWP2311		Flat		
WPF60S	Broadband	WWP2201	1 MHz – 60 GHz	Shaped FCC	E-Field:	0.1 % – 35 % (RMS) 0.1 % – 800 % (CW)
		WWP2202		Shaped ICNIRP 1998/2020		
		WWP2203		Shaped SC6		
WPF90	Broadband	WWP2601	30 MHz - 90 GHz	Flat	E-Field:	1.2 – 70 V/m (RMS) 1.2 – 1000 V/m (CW)

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

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

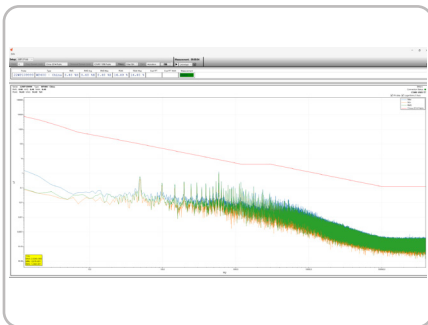
USB to USB-C cable



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 # WSN0001

Including transport cover



Tripod extension
Part # WSN0002

Horizontal extension for LF vertical E-field measurements



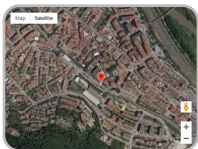
Probe support for tripod
Part # WSN0013

Recommended with the probe extension cable



Probe extension cable
Part # WSN0011 (5 m) and # WSN0014 (2 m)

Extension cable



GPS
Part # WSN00001

Internal embedded GPS



Fibre optics interface
Part # WSN0004 (10 m), WSN0010 (20 m), and WSN0015 (45 m)

Fibre optics + USB converter to PC



Vehicle DC charger
Part # WSN0007

Charge SMP3 from a vehicle DC connector



SMP3 protective pouch
Part # WSN0009

Easily portable protective soft sheath



SMP3 backpack
Part # WSN0008

Soft backpack to fit up to 3 probes