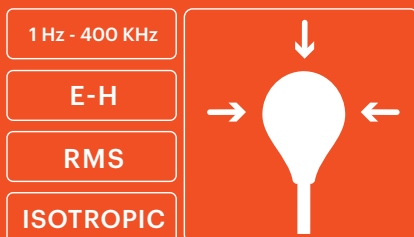


# WP400 Probe

## 1 Hz - 400 kHz



- Electric & Magnetic field measurement
- Isotropic & True RMS measurement
- Spectrum analysis probe
- Measurements in accordance with International Standards



### Power grid

Spot measurement of E and H at transformer stations and high-voltage lines



### Railway

Measurement of E and H fields generated in trains or near railway facilities



### Industry

Measurement in manufacturing facilities with strong electromagnetic fields to ensure worker's safety



## Technical Specifications (extended version)

	Electric Field	Magnetic Field
Sensor type	Patented electrode	Patented electrode
Field Strength Mode		
Frequency range	1 Hz – 400 kHz	1 Hz – 400 kHz
RMS averaging time	1 sec	1 sec
Peak value	digital realtime	digital realtime
Measurement range	1 V/m to 100 kV/m	50 nT - 10 mT (100 Hz -10 kHz see graph) · Increase linearly with decreasing frequency below 100 Hz · Decrease linearly with increasing frequency above 10 kHz
Resolution	< 0.4 mV/m above 8 Hz	< 0.1 nT (at 50 Hz) and < 0.05 nT above 100 Hz
Temperature deviation (typ. At 60 Hz) (referred to 25°C, 50% relative himidity)	– 0.005 dB/°C (-15 °C to 40 °C)	– 0.003 dB/°C (-15 °C to 25 °C) + 0.003 dB/°C (25 °C to 40 °C)
Isotropy	± 5 %	± 4 %
Damage level	> 200 kV/m	> 2000 mT up to 60 Hz This limit decreases linearly with increasing frequency above 60 Hz
Noise level	< 1 V/m (10 Hz - 400 kHz)	< 50 nT (10 Hz – 400 kHz)
Typical Uncertainty	0.67 dB	0.60 dB
Graphical display	RMS, AXIS VALUES, AVG, MAX, MIN, PEAK, Time graphic	
WPM Mode		
Frequency range	1 Hz – 400 kHz	1 Hz – 400 kHz
Standards	ICNIRP 2010 – ICNIRP 98 – Directive 2013/35/EU – BGV B11 – China	
Measurement overload limit	0.5 % - 200 %	0.5 % - 200 %
Typical Uncertainty	0.67 dB	0.60 dB
Graphical display	%, AXIS VALUES (%), AVG (%), MAX (%), MIN (%), PEAK (%), Time graphic	

WP400\_EX\_0516\_EN\_v11

# WP400 Probe

## 1 Hz - 400 kHz



### Technical Specifications (extended version)

	Electric Field		Magnetic Field	
FFT Mode				
Frequency range	1 Hz – 400 kHz			
SPAN (Resolution)	400 Hz (1 Hz) - 4 kHz (10 Hz) - 40 kHz (100 Hz) - 400 kHz (1 kHz)			
Resolution by SPAN	1 Hz	10 Hz	100 Hz	1 kHz
Detection	RMS, PEAK, AXIS (X, Y, Z)		RMS, PEAK, AXIS (X, Y, Z)	
Measurement range	4 mV/m – 100 kV/m		0.5 nT - 10 mT (100 Hz-10 kHz see graph) Increase linearly with decreasing frequency below 100 Hz Decrease linearly with increasing frequency above 10 kHz	
Noise level	< 4 mV/m		< 0.5 nT	
Sampling resolution	1024			
Graphical display	Frequency analysis			
High Pass Filters				
HPF @10 Hz	– 3 dB @ 10 Hz			
HPF @25 Hz	– 3 dB @ 25 Hz			
HPF @100 Hz	– 3 dB @ 100 Hz and rejection > – 18 dBb @ 50 Hz			
Memory				
Maximum measurement	Up to 1000			
Maximum samples	Up to 1 million			
Maximum FFT	Up to 1000			
General Specifications				
Battery Broadband measurement	> 15 h			
Battery Selective measurement	> 4.5 h			
Weight	SMP2 = 600 g   WP400 = 220 g			
Size (with probe)	475 x 120 x 120 mm			

