

### The device is designed to work with networks:

- with nominal frequency 50/60Hz,
- with nominal voltage:  
64/110 V; 110/190V; 115/200V; 127/220V; 220/380V;  
230/400V; 240/415V; 254/440V; 290/500 V; 400/690V.
- DC network

### Supported networks:

- single-phase,
- two-phase with common N conductor,
- three-phase star connection with and without N conductor,
- three-phase delta.

### Parameters of analyzers:

Parameter		Measurement range	Max. resolution	Accuracy
Alternating voltage (TRMS)	—	0.0...760 V	0.01 % U <sub>n</sub>	±0.1% U <sub>n</sub>
Crest factor	Voltage	1.00...10.00 (≤1.65 for 690 V voltage)	0.01	±5%
	current	1.00...10.00 (≤3,6 I <sub>nom</sub> )	0.01	± 5% m.v.
Alternating current TRMS	—	depending on clamp*	0.01% of nominal range	±0.1% of nominal range (error does not account for clamp error)
Frequency	—	40.00...70.00 Hz	0.01Hz	±0.01 Hz
Active, reactive, apparent and distortion power	—	depending on configuration (transformers, clamp)	up to four decimal places	depending on configuration (transformers, clamp)
Active, reactive apparent energy	—	depending on configuration (transformers, clamp)	up to four decimal places	as power error
cosφ and power factor (PF)	—	0.00...1,00	0.01	±0.03
tgφ	—	0.00...10.00	0.01	depends on active and reactive power error
Harmonics and interharmonics	Voltage	as for alternating voltage True RMS	as for alternating voltage True RMS	±5% U <sub>n</sub> for U <sub>n</sub> ≥ 1% U <sub>n</sub> ±0.05% U <sub>n</sub> for U <sub>n</sub> < 1% U <sub>n</sub>
	Current	as for alternating voltage True RMS	as for alternating voltage True RMS	± 5% I <sub>n</sub> for I <sub>n</sub> ≥ 3% I <sub>n</sub> ± 0.15% I <sub>n</sub> for I <sub>n</sub> < 3% I <sub>n</sub>
THD	Voltage	0.0..100.0%	0.1%	±5%
	Current	(in regards to the rms value)		±5%
Active and reactive power of harmonics	—	depending on configuration (transformers, clamp)	depending on minimal current and voltage values	—
Angle between current and voltage harmonics	—	-180.0...+180.0°	0.1°	±(h x 1°)
K- factor	—	1.0...50.0	0.1	±10%
Flicker severity P <sub>ST</sub> , P <sub>LT</sub>	—	0.20...10.00	0.01	±5%
Voltage asymmetry	Voltage and current	0.0...20.0%	0.1%	±0.15% (absolute error)
Mains signaling	Voltage	5...3000 Hz	0.01 Hz	± 0.15% U <sub>n</sub> for 1...3% U <sub>n</sub> , 5% U <sub>n</sub> for 3...15% U <sub>n</sub>
Transients (PQM-711 only)		±6000 V (with max. sampling 10 MHz)	5V	± (0.5% + 25 V)

\*Clamp F-1, F-2, F-3: 0..3000A (10000A<sub>pp</sub>) \*Clamp C-4: 0..1000A (3600A<sub>pp</sub>) \*Clamp C-5: 0..1000A (3600A<sub>pp</sub>) \*Clamp C-6: 0..10A (36A<sub>pp</sub>) (without current transformers) Clamp C-7: 0...100 A (360A<sub>pp</sub>)

### Standard accessories:

- Test leads 2.2 m; 7 pcs (installed),
  - "Crocodile" clip K01; black; 3 pcs,
  - "Crocodile" clip K02; yellow,
  - "Crocodile" clip K02; blue,
  - "Crocodile" clip K02; red; 2 pcs,
  - USB cable,
  - Power supply plug (L1 and N),
  - Adapter AC-16,
  - heavy duty backpack for analyzer, tablet and accessories
- Straps for PQM,
  - DIN Rail Mounting Clip (ISO) (3 - elements),
  - Voltage Adapter with M4/M6 thread; 5 pcs,
  - Magnetic voltage adapter; 4 pcs,
  - Fasteners and bands for mounting the analyzer on a pole; 2 pcs,
  - Sonel Analysis software for data analysis,
  - tablet with case, power supply and USB cable,
  - Built-in rechargeable battery,
  - instruction manual, calibration certificate.

### Additional accessories:

- Carrying case for clamps,
- Carrying case for analyzer and accessories
- External IP67 GPS antenna, 10 m,
- Rechargeable Li-Ion battery



Clamp	C-4	C-5	C-6	C-7	F-1	F-2	F-3
INDEX	WACEGC40KR	WACEGC50KR	WACEGC60KR	WACEGC70KR	WACEGF10KR	WACEGF20KR	WACEGF30KR
Rated current	1000A AC	1000A AC 1400A DC	10A AC	100 A AC		3000A AC	
Max. overload current	1200A AC	1000A AC 3000A DC	20A AC	100 A AC		10kA AC	
Minimal measurable current	100mA	500mA	10mA	20 mA		1A	
Frequency	30Hz...10kHz	DC...5kHz	40Hz...10kHz	40 Hz...1 kHz		40Hz...10kHz	
Input signal level	1mV / 1A	1mV / 1A	100mV / 1A	500 mV / 1A		38.8µV / 1A	
Max. diameter of measured cord	52mm	39mm	20mm	24 mm	360mm	235mm	120mm
Minimal basic accuracy	≤0.5%	≤1.5%	≤1%	0,5%		1%	
Battery power supply	—	+	—	—		—	
Lead length	2.2m	2.2m	2.2m	3 m		2.2m	
Measurement category	IV 300V	IV 300V	IV 300V	III 300 V		IV 600V	