

The device is designed to work with networks:

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

Supported networks:

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

Parameters of analyzer PQM-701:

Parameter		Measurement range	Max. resolution	Accuracy
Alternating voltage (TRMS)	—	0.0...690.0V	0.01 % U_n	$\pm 0.1\% U_n$
Crest factor	Voltage	1.00...10.00 (≤ 1.65 for 690 V voltage)	0.01	$\pm 5\%$
	current	1.00...10.00 ($\leq 3.6 I_{nom}$)	0.01	$\pm 5\%$ m.v.
Alternating current TRMS	—	depending on clamp*	0.01% of nominal range	$\pm 0.1\%$ 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
cos ϕ and power factor (PF)	—	0.00...1.00	0.01	± 0.03
tg ϕ	—	0.00...10.00	0.01	depends on active and reactive power error
Harmonics	Voltage	as for alternating voltage True RMS	as for alternating voltage True RMS	$\pm 5\% U_n$ for $U_n < 1\% U_n$ $\pm 0.05\% U_n$ for $U_n < 1\% U_n$
	Current	as for alternating voltage True RMS	as for alternating voltage True RMS	$\pm 5\% I_n$ for $I_n < 3\% I_n$ $\pm 0.15\% I_n$ for $I_n < 3\% I_n$
THD	Voltage	0.0..100.0%	0.1%	$\pm 5\%$
	Current	(in regards to the rms value)		$\pm 5\%$
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°	$\pm (h \times 1^\circ)$
K- factor	—	1.0...50.0	0.1	$\pm 10\%$
Flicker severity P_{ST} , P_{LT}	—	0.20...10.00	0.01	$\pm 5\%$
Voltage asymmetry	Voltage and current	0.0...20.0%	0.1%	$\pm 0.15\%$ (absolute error)

*Clamp F-1, F-2, F-3: 0..3000A (1000A_{pp}) *Clamp C-4: 0..1000A (3600A_{pp}) *Clamp C-5: 0..1000A (3600A_{pp}) *Clamp C-6: 0..10A (36A_{pp}) (without current transformers)

Standard accessories of the PQM-701 / 701Z / 701Zr:

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|---|---|--------------------|
| - F-3 clamp to 3kA AC (Ø14cm) (4 pcs.) | WACEGF30KR - USB transmission cable, | WAPRZUSB |
| - test lead with banana plugs; 2,2m; black (PQM-701 - 3 pcs, PQM-701Z - 4 pcs.) | WAPRZ2X2BLBB - OR-1 adapter - wireless USB interface transmission receiver | WAADAUSBOR1 |
| - test lead with banana plugs; 2,2m; yellow, | - mains plug with banana inputs (L1 and N) for powering the device, | WAADAAZ1 |
| - test lead with banana plugs; 2,2m; blue (PQM-701 - 1 pcs, PQM-701Z - 2 pcs.) | WAPRZ2X2YEBB - Soneil Analysis software for data analysis, | |
| - RS-232 serial transmission cable | WAPRZ2X2BUBB - SD card, | WAPOZSD1 |
| - "Crocodile" clip K01; black (PQM-701 - 3 pcs, PQM-701Z - 4 pcs.) | - hard carrying case, | WAWALX1 |
| - "Crocodile" clip K02, yellow | - mounting strap, | WAPOZOPAKPL |
| - "Crocodile" clip K02, blue (PQM-701 - 1 pcs, PQM-701Z - 2 pcs.) | WAPRZRS232 - DIN Rail Mounting Clip (ISO) (2 pcs.) | WAPOZUCH2 |
| | WAKROBL20K01 - built-in rechargeable battery, | |
| | WAKROYE20K02 - instruction manual, calibration certificate. | |
| | WAKROBU20K02 | |

Additional accessories of the PQM-701 / 701Z / 701Zr:

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|---|---|---------------------|
| - rechargeable battery | WAAKU09 - Magnetic voltage adapter (4 pcs) | WAADAUMAGKPL |
| - AC line splitter (AC-16) | WAADAAC16 - hand carrying case for clamps | WAWALL2 |
| - Voltage Adapter with M4/M6 thread (5 pcs) | WAADAM4M6 | |



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