



## QNA-P

Portable electrical supply quality analyzer which measures and records according to the IEC-61000-4-30 Standard, class A (certified).

Specially designed for measurements in bad weather or for measurements requiring highly accurate and strong measuring equipment.

The casing for the **QNA-P** has grade IP 67, which guarantees its great strength against strong impacts.

Designed for measuring with clamps, the **QNA-P** analyzer has a wide range of both flexible clamps (LV measurements) and rigid clamps (LV and MV measurements).

Internal selectors allow it to adapt to any type of system (3 / 4 wire) and using both rigid (**CP**) and flexible (**C-FLEX**) clamps.

Type	Description	Code
Kit 1 QNA-P RS	Includes QNA-412 analyzer RS-232/RS-485, case and clamps (kit 3 C-FLEX 20k/2k/200-80)	<b>Q20711</b>
Kit 1 QNA-P GPRS	Includes QNA-412 analyzer GPRS/RS-232, case and clamps (kit 3 C-FLEX 20k/2k/200-80)	<b>Q20731</b>
Kit 2 QNA-P RS	Includes QNA-412 analyzer RS-232/RS-485, case and clamps (kit 3 C-FLEX 20k/2k/200-80, kit 3 CP-5 A and 1 x CPR-500)	<b>Q20712</b>
Kit 2 QNA-P GPRS	Includes QNA-412 analyzer GPRS/RS-485, case and clamps (kit 3 C-FLEX 20k/2k/200-80, kit 3 CP-5 A and 1 x CPR-500)	<b>Q20732</b>

## Memory Distribution

File type	Data stored	Capacity / Memory distribution
*.STD	Voltage, current, Power, PF, Energy, Flicker, harmonics (THD), wave form	74 days
*.EVE	Power ON/OFF, setup change	5.444 recordings
*.EVQ	Events (interruptions, overvoltage, dips)	16.634 recordings
*.H24	Data for statistical study of the change to harmonics each day	32 days
*.STP	Average weekly values for voltage, THD $U$ , flicker, frequency and unbalance	17 weeks

Rotating memory (FIFO)

## Features

Power supply circuit	
Nominal voltage	100 - 240 V AC.
Consumption	16 V·A - 8 W
Frequency	50 ... 60 Hz
Auxiliary power supply	
Battery	Ni-M-H
Independent operating life	4 h continuous operation
Voltage measurement circuit	
Connection	3 or 4 wires (using external connection)
4 wire system connection	0 ... 500 V AC. (phase-neutral)
3 wire system connection	0 ... 500 V AC. (phase-phase)
Other voltages	Via measurement transformers
Frequency	42,5 ... 69 Hz
Sampling frequency	14,13 kHz

Current measurement circuit	
Measurement range	According to clamp
Maximum current	1,2 $I_n$
Sampling frequency	14,13 kHz
Accuracy	
Voltage	0,1 % $U_n$ (IEC 61000-4-30 Class A)
Current	0,1 % $I_n$ (IEC 61000-4-30 Class A)
Power and energy	0,2S according to EN-62053-22
Unbalance	$\pm 0,15$ % (IEC 61000-4-30-Class A)
Flicker	5 % (IEC 61000-4-15) , (IEC 61000-4-30 Class A)
Harmonics	Class I ( $\pm 0,05$ % $U_{nom} / \pm 0,15$ % $I_{nom}$ ), (IEC 61000-4-7), (IEC 61000-4-30 Class A)
Communications	
	RS232 / RS485 GPRS / RS232



<b>Data memory</b>	
Size	4 MB
Configuration	Rotating (FIFO)
<b>Environmental conditions</b>	
Operating temperature	-20 °C ... +65 °C
<b>Construction features</b>	
Casing	According to DIN 43859 standard
Protection	IP-67 (casing), IP-68 (measurement and power supply connectors)
Dimensions	470 x 357 x 176 mm
Weight	6,7 kg
<b>Standards</b>	<b>Quality: IEC 61000-4-30 (certified Class A)</b> <b>Harmonics: IEC 61000-4-7 (Class I)</b> <b>Flicker: IEC 61000-4-15</b>
Other standards	EN 60664, EN 61036, VDE 110, UL 94 EN 61010: Electrical safety Category III 600 V ELECTRO-MAGNETIC EMISSION EN 61000-3-2 (1995), Harmonics EN 61000-3-3 (1995), Voltage fluctuations EN 50081-2 (1993), Industrial emission EN 55011 (1994): Conducted (EN 55022 - Class B) EN 55011 (1994): Radiated (EN 55022 - Class A) ELECTRO-MAGNETIC IMMUNITY EN 50082-2 (1995), Industrial immunity EN 61000-4-2 (1995), Electrostatic discharge ENV 50140 (1993), Radiated field EM of RF EN 61000-4-4 (1995), rapid transient bursts ENV 50141 (1993), RF in common mode EN 61000-4-8 (1995), magnetic field at 50 Hz EN 50082-1 (1997), Domestic immunity EN 61000-4-5 (1995), Shock wave EN 61000-4-11 (1994), Power supply

