POWER QUALITY MONITOR

PQM 100

Power Quality

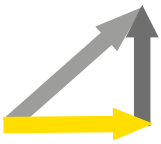
Harmonics, THD Supraharmonics, Symmetrical components etc.

System Dynamics

Phasor Measure Unit (PMU), Rate of Change of Frequency (RoCoF), WAMS, etc.

Transients

1/2 period values, Phase Angle jumps, Resonances, Switching etc.



Power

Active, reactive, apparent power, PF, harmonic power, energy, etc.

ACCURACY	0.1%
SAMPLING RATE	16kS/s or 32kS/s
RESOLUTION	24bit
SAFETY CATEGORY	CAT IV 300V
MODULAR SYSTEM	up to 64 ch

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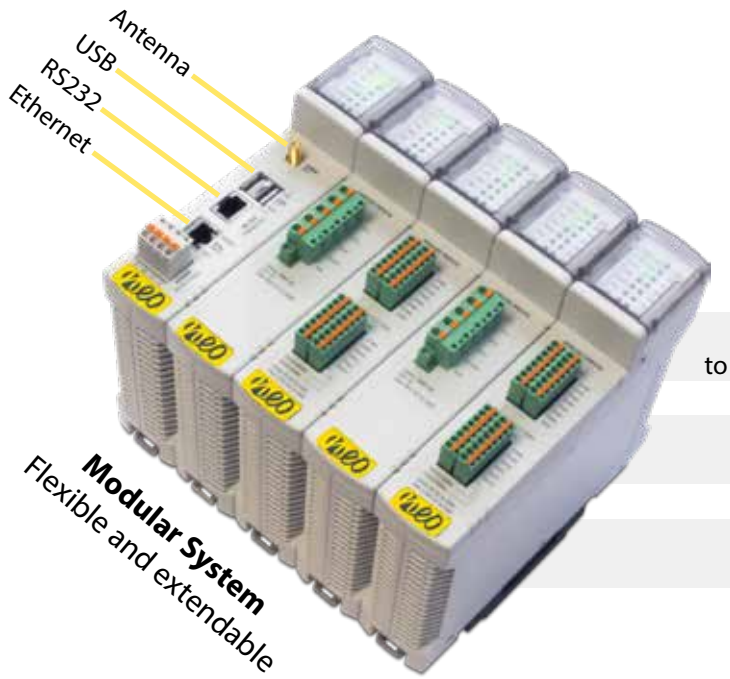


LIVE DATA
to SCADA (IEC61850/ 60870-5-104 /Modbus)

HISTORY DATA
to SQL Database

LOCAL DATA
via USB storage

HYBRID DATA STORAGE	DATA ON-DEMAND	REMOTE CONFIGURATION	REMOTE LOCATION
Even if the connection is lost all data are stored locally and will be transmitted after reconnection.	All data can be transferred continuously or just triggered on demand.	The instrument can be configured remotely or locally. Either option also can be disabled.	All data can be transmitted via Ethernet and via a GSM connection.

TECHNICAL SPECIFICATIONS

Operating Temperature	- 25°C up to + 60°C
Storage Temperature	- 30°C up to + 80°C
Humidity	< 95%, no condensation
Nominal Voltage Input	24V DC
Nominal operation input current / power	0,5A / 12W (max. 1,5A / 36W)
Protection	IP20
Power Quality	Class A (according to EN61000-4-30 Ed.3)
Dimensions	180 x 120 x 158 mm (h x w x d)
Weight	1.5kg
Interfaces	Ethernet, USB, Serial Port, RS232(e.g. for reading data of revenue meter)
Data File Format	.csv (for local storage)

Full technical specifications can be downloaded at:
www.neo-messtechnik.com
or requested via
support@neo-messtechnik.com

SPECIFICATIONS

PQM-100 is based on modular architecture, allowing combination of one CPU module and up to 6 selected input modules into one device. The input modules are providing input signal isolation, filtering and A/D conversion. The CPU module is equipped with FPGA real-time controller for the calculation of all parameters and to provide all interfaces and data storage.

CPU MODULE	
CPU	CPU module (667 MHz dual-core, FPGA, real-time OS) with 8-32 GB SD card, Ethernet, serial port, USB for data download and direct PC connection, 24V DC (power supply not included)
OPTIONS	- PQM100-CPU-GPS: extended with an integrated GPS receiver - PQM100-CPU-GPS-F: extended with a fiber optic interface for GPS

INPUT MODULES	
All analog input modules are providing 24 bit sigma-delta A/D conversion.	
HV4	4 channel high voltage input module, 300V RMS range (measuring up to 600V RMS), 16 kS/s or 32 kS/s per channel, 6kV isolation, CAT IV 300V, 1MΩ Input Impedance
HV4LV4	4 channel high voltage input module, 300V RMS range (measuring up to 600V RMS), 16kS/s or 32 kS/s per channel, 6kV isolation, CAT IV 300V, 1MΩ Input Impedance 4 channel low voltage input module, 1V RMS range, 16 kS/s per channel, 2.5kV isolation
LV16	16 channel low voltage input module, 1V RMS range, 16kS/s per channel. 2 channels can be switched to temperature measurement with PT1000
LV8	8 channel low voltage input module, 1V RMS range, 16 kS/s per channel
LA5-1	5 channel current input module, 1A RMS range, 16 kS/s per channel
LA5-5	5 channel current input module, 5A RMS range, 16 kS/s per channel
DIO	8x Digital Input (24 V DC, galvanic isolated, CAT III 150V) 4x Digital Out (Relays, 8A/250V AC, galvanically isolated, CAT III 300V)

PQM 100

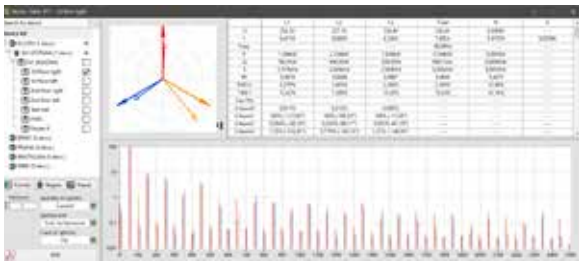
TURNKEY SOLUTIONS

We can provide turnkey solution for your project. After discussing the requirements, we will create a specification book including plans (circuit plan, item list, etc.) and schematics.

After approval you will receive your turnkey measurement solution. One example is shown in the picture. In addition to the measurement instrument, other electrical equipment such as a power supply, protection,wiring etc. is provided in a cabinet.

PQM-SCADA

PQM-SCADA is the enterprise management software for Power Quality Analyzers. PQM-SCADA software shows real-time data of all the PQ instruments as well as historical data stored in a central server or cloud storage. Data visualization, data analysis, report generation (EN50160), and notifications are just a few of the powerful features of PQM-SCADA software.



PQM MONITORS

	PQM 100	PQM 200
		
Accuracy	0.1%	0.05%
Sampling Rate	16kS/s or 32kS/s	144kS/s
Resolution	24bit	24bit
Safety	CAT IV 300V	CAT IV 600V