



Power Quality acc. to IEC 61000-4-30 ed.3

- ✓ Modern Control
- ✓ Harmonic Analysis including 200Hz spectra, and 2kHz spectra (with ENA8000H up to 500kHz)
- ✓ Power and Energy
- ✓ Disturbances
- ✓ Waveform Capture
- ✓ Symmetrical Components
- ✓ Phasor Measurement Unit (PMU)

ENA8000

Class A Portable Power
Quality Analyzer

ENA8000

The firmware calculates power quality parameters according EN50160 fully follows requirements described in IEC 61000-4-30 Class A and others (61000-4-7, 61000-4-15).

MAIN MEASUREMENT FUNCTIONS ARE:

- › U, I, P, Q, S, frequency, THD U, THD I, power factor, energies – AP, AQ, AS, APin, APout, all quantities are per phase and total
- › Harmonics – U, I, P, Q up to 50th harmonic, U and I also as 200Hz spectra (0-9 kHz) and 2kHz spectra (0-68 kHz)
- › **ENA8000H model provides 2kHz spectra up to 500kHz**
- › Symmetrical components - three-phase system de composition into a positive, negative, and zero component
- › All quantities are calculated on 200 ms (10/12 period basis) according to IEC 61000-4-30
- › Voltage quality according to EN50160, IEC 61000-4-30 Class A (U, freq., THD U, flicker, unbalance, harmonics)
- › Voltage events according EN50160, IEC 61000-4-30 Class A (dip, swell, interruption – time, extrema, length)
- › Waveform capture (transients) – in case of trigger, the device captures the waveform
- › Trigger can be activated by selected quantities (U, I, P, Q, S, freq., PF) crosses specified limits
- › Waveform means raw voltage/current signal with sampling rate at 9,6 k/19,2 k/57,6 k/124 k per second, waveform length is up to 60 periods, with pre-trigger up to 1.2 second
- › ENA8000H provides waveforms with up to 840kSa/s, stored waveform length is then limited to 6 seconds
- › Disturbances – in case of trigger, the device captures the half-period RMS quantities
- › Trigger can be activated by selected quantities (U, I, P, Q, S, freq., PF) crosses specified limits
- › Capture contains half-period quantities of voltage, current, frequency, power etc. (sampling rate is 100 samples per second), capture length is up to 15 minutes, with pre-trigger up to 30 seconds

FUNCTIONALITY

VOLTAGE INPUT

Channels	4
Input Range	500 V (Measuring up to 1000 V)
Accuracy	0.05 %
Isolation Voltage	6 kV
Impedance	10 MOhm

CURRENT INPUT

Channels	4
Current Clamps	Clamps, Rogowski Coils
Input Range	Acc. to the sensors, typical 5 A for clamps, 3000 A for Rogowski Coils
Accuracy	Clamps 0.1 %, Rogowski Coils 0.5 %

HARDWARE

Display	10", 800 cd, touchscreen
Data Storage	250 GB
Interfaces	USB, Ethernet, Wi-Fi
A/D Conversion	24-bit sigma-delta
Transient Sampling Rate	9.6 kSa/s, 19.2 kSa/s, 57.6 kSa/s, 124 kSa/s ENA8000H: 500 kSa/s, 840 kSa/s
Power Supply	100 VAC - 240 VAC
Battery	2 hours, 100 Wh
Class	CATIV 300 V
OTHERS	
Optional Interfaces	GPS, CAN RS-485, Analog inputs

PARAMETERS