

PTD-3G

Portable meter testing device



- Active, reactive and apparent energy measurement with error calculation
 - Measurement error of active energy [$\cos\phi=1$]: $\pm 0,5 \%$
- Active, reactive, apparent power measurement (per phase and aggregate)
 - Measurement error: $\pm 0,5 \%$
- Current measurement
 - Measurement error: $\pm 0,5 \%$
- Voltage measurement
 - Error: $\pm 0,2 \%$ in range 50...270 V
- Power factor measurement
 - Measurement range: -1...+1
 - Resolution: 0,001
- Frequency measurement
 - Measurement range: 45...65 Hz
 - Resolution: 0,01 Hz
- Harmonics analysis
 - Harmonic components from 2 to 30 in-percent of the fundamental wave
 - Numeric values of each component
 - Chart in a logarithmic scale
- Vector diagram displaying
- Measurement of angles
 - Current phase shift angles, resolution: $0,1^\circ$
 - Angles between phase voltages, resolution: 1°
- Power quality measurement
 - Voltage variation measurement
 - Frequency variation measurement
 - Total harmonics distortion
 - Power outages



Technical Specification

PTD-3G

Application

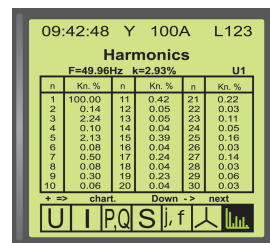
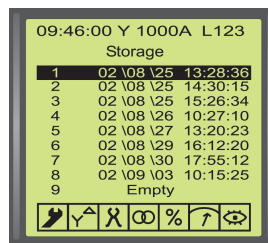
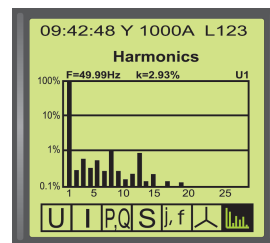
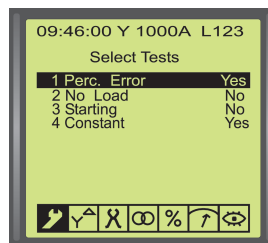
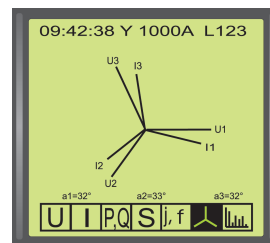
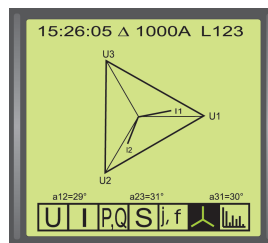
- On site testing of inductive and electronic single-phase and three-phase electricity meters
- Power quality monitoring (according to standard IEC50160)
- Measurement of instantaneous values
- Profile recording

Features

- Powered by measuring circuits
- Wide current measuring range (500mA ... 1500A)
- Sizeable graphical LCD indicator (128x128 dots) with backlight
- Electronic test output
- RS 232 or USB interface for connection to PC
- Current loop interface according to IEC62056-31 for connection to AMR system

Data storage

- Up to 64 records of on site meter testing results. Each record can include up to 4 test results (if all test were performed by one request)
- Up to 32 records of energy quality monitoring. Each record includes information about voltage, frequency variations
- Up to 64 snapshots of instantaneous values (including vector diagram and harmonics)
- Recording of up to 6 profiles for chosen measuring values with measurement period from 10s to 60 min.



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Power supply

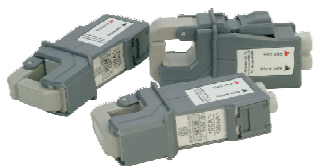
• Powered by voltage measuring circuits	50 V ... 270 V, consumption: < 2 W per phase
• Powered by auxiliary circuit	50 V ... 270 V, consumption: < 6 W

Profiles

• Number of channels for profile recording	6 with 25 different parameters available
• One of 5 registration algorithms for each channel	Minimum value per measurement period Maximum value per measurement period Average value per measurement period Snapshot at the end of measurement period Standard deviation per measurement period
• Range of measurement period	10s ... 60 min

Current clamps

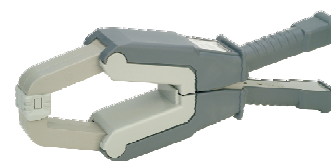
• Current range 0,5A ...100A



• Current range 5A ...1000A



• Current range 10A ...1500A



Scanning head

• Usable with	Induction and electronic meters
• Supply voltage	6 ... 12 V
• Dimensions	270 mm x 95 mm x 80 mm

Electronic block

• Max clamping capacity:	
- Cable, mm	80
- Bus bar, mm	100x50 or 120x45
• Housing and protection level	Hard plastic, IP 40
• Dimensions and weight	157x189x67 mm, 0,8 kg
• Operation temperature	-20 °C ... +50°C



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