

Handhold Power Meter

ME345 Poly-phase

- 2*2900mAh lithium battery
- 16GB memory, USB DISK download
- RJ45-Modbus-TCP
- PE-N Voltage
- Phase N current measurement
- 51 times meanwhile Harmonic display



Description

ME435 Electrical Network Analyzer Power Quality Analyzer

The power meter measures currents and voltages and reports real-time RMS values for all 3-phases and neutral. In addition, the power meter calculates power factor, active power, reactive power, and more. The following sections list the metering characteristics of the power meter.

Connectivity advantages

Model	ME435
Support Extra sensor	BNC terminal 333mV CT BNC terminal Rogowski coil
Storage	1GB SD card(Max 4GB) (save intervals 1mins default)
Power	4*AA battery(wroking time: approx 7 hours) Or 9V DC power supply(included adaptor)

Mechanical characteristics

Weight	350g
Dimension	L*W*D:21.5*10*3.5CM

Feature Specifications

Product type	Handheld Data logger; Three phase Power quality analyzer
Poles description	3PH4W 3PH3W 1PH2W (L-N); 1PH2W(L-L);1PH3W(L-L-N)
Device application	Power analysis Energy meter
Input type	External Rogowski coil External CT(333mV only)
Display	3.5 inch TFT screen display
Sampling rate	8k samples per second
Harmonic	52th Max

Data Record

The power meter records data to SD card, the following table lists data record of the power meter.

Record interval	1s to 9999s (default 1min)
Record format	CSV
Record capacity	Micro SD card 1GB (default) Store about 1K Bytes data each time Record 2 years (1min & 1GB)
Record data	Date&time, Voltage(V),UTHD(%),Current(A),ITHD (%), ITHD3(%),ITHD5(%), ITHD7(%), ITHD11(%), ITHD13(%), ITHD3(A), ITHD5(A), ITHD7(A), ITHD11(A), ITHD13(A) Frequency(Hz), PF(power factor), Active Power(W),Reactive Power(Var),Apparent Power(Va), Active Energy(Wh),Reactive Energy(Varh),Apparent Energy(Vah) Current Demand(A),Current Peak Demand(A)&Date Total Active Power Deamnd(W) Total Active Power Peak Deamnd(W)&Date Total Reactive Power Deamnd(W) Total Reactive Power Peak Deamnd(W)&Date Total Apparent Power Deamnd(W) Total Apparent Power Peak Deamnd(W)&Date

Other Characteristics

Handheld Data logger; Three phase Power quality analyzer

Minimum and maximum values	-
Peak demand values	-
Current demand calculation method	1 to 60 minutes
Power demand calculation method	1 to 60 minut

Environmental conditions

Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +85°C
Humidity rating	5 to 95% RH at 50°C (non-condensing)
Pullution degree	2
Overvoltage category	III,for distribution systems up to 277/480VAC
Dielectric withstand	As per IEC61010-1, Doubled insulated front panel display
Altitude	3000m Max
IP degree of protection	IP20 conforming to IEC 60629

EMC

Electrostatic discharge	Level IV(IEC61000-4-2)
Immunity to radiated fields	Level III (IEC61000-4-3)
Immunity to fast transients	Level IV (IEC61000-4-4)
Immunity to surge	Level IV (IEC61000-4-5)
Conducted immunity	Level III (IEC61000-4-6)
Immunity to power frequency magnetic fields	0.5mT (IEC61000-4-8)
Conducted and radiated emissions	Class B (EN55022)

Standard compliance

EN 62052-11,EN61557-12,EN 62053-21,EN 62053-22,EN 62053-23,EN 50470-1,EN 50470-3,
EN 61010-1,EN 61010-2,EN 61010-031

Measurement accuracy

Rated current (5 level selectable)	100A(0.5% from 10A to 120A)	
	600A(0.5% from 10A to 720A)	
	1000A(0.5% from 10A to 1200A)	
	3000A(0.5% from 30A to 3600A)	
	6000A(0.5% from 60A to 7200A)	
Rogowski coil connect setting	100A	MRC-16
	600A	MRC-36
	1000A	Y-FCT-200 or Y-FCT-350 or NRC-100
	3000A	NRC-150 or Y-FCT-510
	6000A	NRC-200 or Y-FCT-800
CTs connect setting	Primary setting:	from 1A to 999999A
	Secondary setting:	from 0.001mV to 333mV
Voltage	0.2% from 60V to 500V	
Power factor	±0.005	
Active/Apparent Power	IEC62053-22 Class 0.5	
Reactive power	IEC62053-21 Class 2	
Frequency	0.01% from 45 to 65Hz	
Active energy	IEC62053-22 Class 0.5s	
Reactive energy	IEC62053-21 Class 2	

Input-current characteristics

Primary current range	100A	0.5A to 120A
	600A	0.5A to 720A
	1kA	1A to 1200A
	3kA	3A to 3600A
	6kA	6A to 7200A
Measurement input range	1/2 ²⁵ mV-333mV	
Permissible overload	600mV for 10s/hours	

Power Supply

Power	4*AA battery(working time: approx. 7hours)	
	5V-9V DC power supply(included adaptor)	

Power Consumption

Screen Backlight On	1100mW
Screen Backlight Off	900mW

Wire diameter for terminals

Current input	BNC connector
Voltage input	Banana plug
DC power supply	DC 5.5*2.1 plug

Accessories

Voltage wires	4pcs voltage clamp wires with banana plug (2 meters, 1.5mm ²)
Adaptor	85-265 AC to 9V DC adaptor
SD card	1GB
Remark	Rogowski coil and AA battery not included