Power Analyzer/Meter

Single-phase Power Meter
TM-9200

TM-9200

Product description:

Designed advanced 32-bit high-speed processor and dual 24-bit AD converters, featuring high precision, wide dynamic range, a compact and agile structure. It's a new generation of touchscreen operation. With the continuous introduction of a new energy efficiency standards, fierce competition is taking place around improving energy-saving performance. It is measurement instrument used by many companies to evaluate the energy-saving performance of equipment, featuring high precision, ultra-low standby power consumption and meeting ICE62301-2016 standard. RS232/485, USB and Ethernet interfaces basically meet the diverse testing and communication needs of users.

Features

- DC bandwidth of 0.5-1kHz with a maximum accuracy of 0.15%.
- The LCD digital display can show V/I/W/PF/HZ/harmonics and more simultaneously.
- Measure Vmax of 600Vac/dc, Imax of 40Aac/dc and Pmax of 24kW.
- It has the fastest refresh rate of 0.1 seconds.
- Supports standard RS-232/485/USB communication and Ethernet (optional).

Ordering Informations

TM-9200 : High-precision Single-phase Power Meter 600V/45A with Harmonic function

Standard Accessories :

- User Manual
- Power cord

Specifications

Model	TM-9200			
Measurement Accuracy	0.15%			
Input Method	Voltage and current are floating input			
Display Mode	LCD screen (touchscreen control)			
Display Update	Display refresh period can be selectable : 0.1s to 5s			
Measurement Parameter	U(RMS), U(V-mean), U(DC), U(AC), U-pk, U-pk, I(RMS), ((DC), I(AC), I+pk, I-pk, P, S, Q, λ, Ø, P+pk, P-pk, fU, fI, fPLL (PLL U), fPLL (PLL I), Time, WP, WP±, q, q±, U(k), I(k), Uthd, Ithd, Uhdf(k), Ihdf(k)			
Measuring Mode	RMS, MEAN (Voltage MEAN), AC, DC			
Line Filtering	Cut-off freqnecy 500Hz			
A/D Conversion	Sampling period 70μs, 24 bits, voltage and current simultaneous sampling			
Input Impedance	Voltage input impedance is 2MΩ, current input impedance is 0.5Ω, High-grade is 4mΩ. The input imdedance of the input terminal of External sensor signal changes according to the change of input voltage: 10V: 100kΩ, 2V: 20kΩ			
Zero Mode	Calibrate the zero point each time when the range is changed or the measurement mode is changed			
Bandwidth	DC, 0.5Hz ~ 1kHz			
Parameters	**Measuring Range**	**Error**		**Min Resolution**
Voltage	0.5 ~ 600V	DC 0.5 Hz ≤ f < 45 Hz 45 Hz ≤ f ≤ 66 Hz 66 Hz < f ≤ 1 kHz	± (0.1% of the reading, 0.2% of the range) ± (0.1% of reading + 0.2% of range) ±(0.05% of reading + 0.1% of range) ±(0.1% of reading + 0.2% of range)	0.001V
Current	0.05mA ~ 45A			0.001mA
Active Power	U*I*PF	DC 0.5 Hz ≤ f < 45 Hz 45 Hz ≤ f ≤ 66 Hz 66 Hz < f ≤ 1 kHz	± (0.1% of the reading + 0.2% of the range) ± (0.3% of reading + 0.2% of range) ±(0.05% of reading + 0.1% of range) ±(0.2% of reading + 0.2% of range)	0.0001mW
Power Factor	0.01 ~ 1	0.5 Hz ≤ f ≤ 66 Hz 66 Hz < f ≤ 1 kHz	±0.01 ±0.02	0.001
Frequency	0.5Hz ~ 1kHz	0.1%		0.01Hz
Electric Energy Accumulation	0～999999MWh/ 0～-99999MWh	DC 0.5 Hz ≤ f < 45 Hz 45 Hz ≤ f ≤ 66 Hz 66 Hz < f ≤ 1 kHz	± (0.1% of the reading + 0.2% of the range) ± (0.3% of reading + 0.2% of range) ±(0.05% of reading + 0.1% of range) ±(0.2% of reading + 0.2% of range)	0.001mWh
Total Ah	0～999999MAh 0～-99999MAh	DC 0.5 Hz ≤ f < 45 Hz 45 Hz ≤ f ≤ 66 Hz 66 Hz < f ≤ 1 kHz	± (0.1% of the reading + 0.2% of the range) ± (0.1% of reading + 0.2% of range) ±(0.05% of reading + 0.1% of range) ±(0.1% of reading + 0.2% of range)	0.001mAh
Electric Enrgy Timing	99999h	± 2 seconds/hour		1 second
Harmonic	1 to 50 times Accuracy class: Class B IEC61000-4-7	Highest number of analyses at fundamental frequency 10Hz ~ 65Hz 65Hz ~ 100Hz 100Hz ~ 200Hz 200Hz ~ 400Hz	 50 32 16 8	0.01
Interface	Standard USB/RS232/RS485, Ethernet (optional)			
Power Input	AC100V-240V 45-440Hz DC100V-300V, <10VA			
Dimension (WxHxD)	215mm×88mm×386mm.			
Weight	Approx. 3kg			