

FTM8008 series

High precision AC and DC measuring instrument



Characteristic

- Measurable single-phase AC and DC voltages, currents, frequencies, and active power;
- Multiple measurement ranges for voltage and current, automatic switching is available, and the measurement can reach 120% of the range limit;
- Voltage measurement range: DCV: -2000V~2000V, ACV: 0~1414V;
- Current measurement range: DCI: -1500A~1500A, ACI: 0~1060A;
- Voltage measurement accuracy: 0.004% + 0.01% F.S.;
- Current measurement accuracy: 0.008% + 0.006% F.S.;

Main interface display

FTM8008 offers comprehensive electrical parameter measurement capabilities, covering voltage, current, power and power consumption. Its core advantage lies in the real-time display with up to 7-digit resolution. The combination of excellent accuracy and refresh rate provides a precise data source for customer R&D verification, product testing and energy consumption assessment.



Summarize

FTM8008 series high precision AC and DC measuring instrument is a new generation of high precision AC and DC measuring instrument produced by Faithtech. The product adopts new software and hardware design, can simultaneously measure single-phase AC and DC voltage, current, frequency, active power, etc., can be widely used in measurement research institute, electric power, measurement, military industry, manufacturing, scientific research and other fields of AC and DC measurement, government inspection institutions and other measurement fields for single-phase AC and DC voltmeter, ammeter, power meter.

- Portable design, convenient for on-site measurement;
- Standard equipped with RS232, RS485, LAN, CAN communication interfaces, and can directly communicate with PC;
- Supports ModBus and CANOpen communication protocols;
- 7-inch touch screen operation, with Chinese and English menu interfaces;
- Can be externally connected with Hall sensors.

Data recording and export

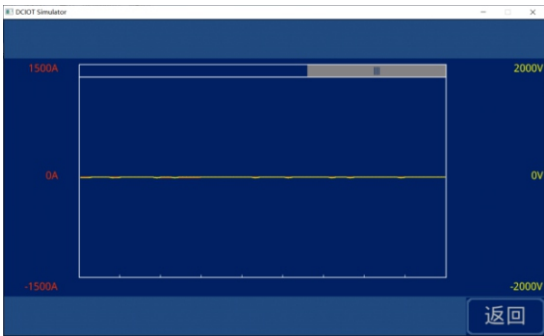
FTM8008 has data recording capability. Users can precisely control the start and end times of the recording to ensure the capture of the target data segment. The recorded data can be conveniently exported via USB as standardized tabular files (such as CSV), and is perfectly compatible with various data analysis software and office tools.

The screenshot shows the 'Data Recording and Export' interface. It displays a table of recorded data with columns for Time, Current (A), Voltage (V), Power (W), and Energy (kWh). The data is recorded from 2025-05-26 13:14:32 to 2025-05-26 13:14:41. At the bottom, there are buttons for 'Start', 'Stop', 'Export', 'Clear', and 'Return'.

时间	电流(A)	电压(V)	功率(W)	能量(kWh)
2025-05-26 13:14:32	5.968820e-004	1.251820e-005	7.471888e-008	8.023739e-014
2025-05-26 13:14:33	6.592428e-004	3.874302e-005	2.554106e-008	1.010643e-013
2025-05-26 13:14:34	7.082405e-004	1.281625e-004	9.076990e-008	1.168472e-013
2025-05-26 13:14:35	7.082405e-004	1.281625e-004	9.076990e-008	1.168472e-013
2025-05-26 13:14:36	6.859688e-004	1.937151e-005	1.328825e-008	1.323572e-013
2025-05-26 13:14:37	6.859688e-004	1.937151e-005	1.328825e-008	1.323572e-013
2025-05-26 13:14:38	6.859688e-004	1.937151e-005	1.328825e-008	1.323572e-013
2025-05-26 13:14:39	6.458797e-004	3.874681e-005	2.502578e-008	1.899429e-013
2025-05-26 13:14:40	6.458797e-004	3.874681e-005	2.502578e-008	1.899429e-013
2025-05-26 13:14:41	6.458797e-004	3.874681e-005	2.502578e-008	1.899429e-013

Curve display

FTM8008 can simultaneously draw the measurement curve in real time during the measurement process, making the changes in data clearly visible. It intelligently senses the signal amplitude and automatically switches to the optimal range to ensure precise measurement throughout the process. It eliminates the need for manual gear shifting, making the testing both fast and accurate.



External current sensor function

FTM8008 can be easily connected to various current sensors, and the measurement range can be expanded as needed. Moreover, in the settings, the sensor ratio can be precisely configured to ensure accurate and reliable readings, perfectly adapting to your exclusive testing plan.



Order information

Product model	Range of measurement			
	DC current measurement	AC current measurement	DC voltage measurement	AC voltage measurement
FTM8008-06	±3A/±600A	3A/424A	±10V/±100V/±1000V/±2000V	10V/100V/707V/1414V
FTM8008-10	±3A/±1000A	3A/707A		
FTM8008-15	±3A/±1500A	3A/1060A		

Specification table

Model				FTM8008-06	FTM8008-10		FTM8008-15	temperature/°C(%RD+%FS)
DC measurement	Voltage	measurement	±10V	0.004%+0.006%F.S.			0.0002%+0.0003%	
			±100V	0.004%+0.006%F.S.			0.0002%+0.0003%	
			±1000V	0.004%+0.006%F.S.			0.0002%+0.0003%	
			±2000V	0.004%+0.01%F.S.			0.0002%+0.0003%	
	Current	Range1	Measurement range	±30mA			—	
			Measurement accuracy	0.004%+0.008%F.S.			0.0002%+0.0006%	
		Range2	Measurement range	±300mA			—	
			Measurement accuracy	0.004%+0.006%F.S.			0.0002%+0.0006%	
		Range3	Measurement range	±3A			—	
			Measurement accuracy	0.004%+0.006%F.S.			0.0002%+0.0006%	
		Range4	Measurement range	±60A	±60A	±75A	—	
			Measurement accuracy	0.008%+0.008%F.S.			0.0002%+0.0006%	
		Range5	Measurement range	±600A	±600A	±750A	—	
			Measurement accuracy	0.008%+0.006%F.S.			0.0002%+0.0006%	
Range6	Measurement range	—	±1000A	±1500A	—			
	Measurement accuracy	0.008%+0.006%F.S.			0.0002%+0.0006%			
AC measurement	Voltage measurement accuracy (true RMS)*2		10V				0.0006%+0.001%	
			100V	0.05%+0.05%F.S.			0.0006%+0.001%	
			707V				0.0006%+0.001%	
			1414V	0.05%+0.1%F.S.			0.0006%+0.001%	
	Current (true RMS) *2	Range1	Measurement range	30mA			—	
			Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%	
		Range2	Measurement range	300mA			—	
			Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%	
		Range3	Measurement range	3A			—	
			Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%	
		Range4	Measurement range	60A	60A	75A	—	
			Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%	
		Range5	Measurement range	424A	600A	750A	—	
			Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%	
Range6	Measurement range	—	707A	1060A	—			
	Measurement accuracy	0.1%+0.04%F.S.			0.001%+0.0015%			
Frequency measurement	Frequency measurement range			10Hz ~ 400Hz				
	Frequency measurement accuracy			0.03%				
	Resolution			0.01Hz				
Other								
Working voltage				AC100V ~ 240V, 50Hz/60Hz				
Working temperature				10℃ ~ 40℃				
Communication interface				RS485、RS232、LAN(TCP/IP)、CAN				
Communication protocol				Modbus、CAN-Open				
Relative humidity				<70%RH, non-corrosive gas				
Weight				4.3kg				
Size				347(W) * 122(D) * 182(H)mm				

All specifications are subject to change without notice

Note:

*1. The accuracy of all the above parameters is guaranteed within 23℃±5℃;

*2. AC parameters are measured as true RMS values within 10Hz to 400Hz;