

FU2000

MULTIFUNCTION ELECTRICAL DIGITAL POWER METER

FU2000 digital power meter is a multifunction electrical digital power & energy meter, it can measure all the electrical parameters in the power line, and it has RTC, calendar and one pulse output, one RS485, with modbus RTU communication. As an advanced smart and digital front end data sampling unit, the FU2000 electrical digital power meters can be used in various control system, industrial automation, smart buildings, energy management system, substation automation, residential power monitoring, smart distributor and switch gears. They are easy to install, connect, maintain. They need less project cost and field programming on spot for power grid grouping with different PLC and industrial control PC communication software.

Features

1. It has RTC, calendar;
2. Energy pulse output;
3. 4-line LCD with backlight;
4. Accuracy class can reach 0.5;
5. RTU-Modbus communications;
6. 3×220/380V, 3×5A, 3PW or 3P3W;
7. Direct voltage input up to 600V / AC;
8. Measure all the electrical parameters;
9. Multifunction power meter and energy meter;
10. The kWh meter data can be reset by password;
11. After power supply failure, the setting parameters are not lost;
12. 120×120mm panel installation, 92×92mm trepanning dimension;
13. Directly display primary measured value, and programmable PT/ CT ratio arbitrarily;
14. There are six wiring modes: 3P4W, 3P4W balance, 3P3W, 3P3W balance, 1P2W and 1P3W;
15. Measure phase voltage, line voltage, current, power, power factor, frequency, positive and negative active energy metering and positive and negative reactive energy metering;



Application

1. Power plant;
2. Data logging;
3. Energy meter;
4. Intelligent building;
5. Power quality analysis;
6. Data transmission center;
7. Power monitoring system;
8. Airport, Hotel, Subway etc;
9. Photovoltaic power station;
10. Commercial, industrial, utility;
11. Low voltage distribution cabinet;
12. Electric energy metering cabinet;
13. High voltage distribution cabinet;
14. Industrial and mining enterprises;
15. Mobile communication company;
16. Medium and low voltage systems;

- 17. Energy consumption monitoring system;
- 18. Metering of capacitor banks and motors;
- 19. Electric energy metering of photovoltaic power station;
- 20. Metering of distribution feeders, transformers, generators;

Parameters

Electrical parameters

Power supply (AC/DC)	AC 85-265V/DC 85-330V, DC18-90V (option) Power Consumption: <4VA
Class	0.5, 1.0
Measurement parameters	Voltage (Ph-N); Voltage (Ph-Ph); Current; Frequency; PF; Active Power (W); Reactive Power (Q); Apparent Power(S)
Computation	Forward active power energy Reverse active power energy Forward active power energy Reverse reactive power energy
Measuring range	30-600V, 0-6A, 45-65Hz, -1 ~ 0 ~ 1
Measuring accuracy	Frequency: 0.1% Electric energy: 0.5%, 1.0% Voltage : 0.2%±0.1V Current : 0.2%±0.001A Power : 0.5% ±0.4W Power Factor : 0.5% ±0.001
Display	LCD Display, 128X64 Lattice, English and Chinese interface, 4 Displays. Green back-lit 4 operation keys.
Communication	RS-485 interface port support, 32(128) Networking, RTU- ModBus communication protocol.
Programmable	Measuring system: 3P4W/3P3W etc. Transformation ratio: PT, CT Communication: Address: 1-247; Baud: 1200-19200; Parity Bit: N/E/O RTC: year; month; day; hour; minute; second Energy: reset
Energy pulse (optional)	One active energy pulse output Pulse constant: 5000kWh Photocoupler output (0.1Ax30V)
Connection mode	3P4W, 3P4W BAL, 3P3W, 3P3W BAL, 1P2W, 1P3W
RTC	Accuracy drift less than 2.5min/year
Standard	EN610101:2010; EN61010-2-030:2010; EN61326-1:2013; EN61000-3-2:2014; EN61000-3-3:2013; IEC61000-4; IEC61557-12; IEC60068-2-1/2/30 IEC 62052-11; IEC 62053-21; IEC 62053-22

Mechanical parameters

Dimensions (mm)	Mounting Panel: 120x120 Thickness: 21 Depth: 118
Weight	650g
Mounting	Panel mounting Trepanning: 92x92mm

Environmental conditions

Temperature	-25 to +55°C
Humidity	20%-95%RH, without condensation