Single-phase AC/DC Power Meter
AN8721PV3(F)

Product Introduction

This AN8721PV3(F) series AC/DC power analyzer adopts STM32 controller as the core and supplemented by FPGA, using direct sampling and intelligent identification technology, widely used in electrical measurements of single-phase electrical equipment, such as voltage, current, power, power factor, frequency, electrical energy, time etc., wide range, 4-window LED highlight, simple operation, U disk read/write, serial communication, parameter alarm, voltage/current ratio settings and other functions, multi-purpose, accurate and durable.

Features

- AC/DC universal wide-range, DC ~ 4kHz bandwidth, load adaptability;
- Reliable, stable, compact, light, the machine depth is only 30cm;
- High measurement speed, up to 0.25s refresh rate;
- Voltage/current ratio setting, easy expansion;
- Standard RS-232 or RS-485 serial port, MODBUS communication, test automation;
- Optional digital I/O, remote input and alarm signal output.

Applications

- Strict industrial site type test;
- High temperature aging room test;
- Home appliances, commercial appliances line standby power measurement;
- Power tools test;
- Lighting test.

Specifications

Model	AN8721PV3(F)	AN8711PV3(F)	AN8711JV3(F)
Measurement parameters	Voltage U、current I、active power P、reactive power Q、apparent power S、power factor λ、phase angleΦ、voltage frequency f、electric energy Wh、electric energy time Time		
Wiring	Common ground short circuit between voltage/current terminals (not removable),only support Ammeter internal connection		No short circuit,support four-wire method long-distance measurement wiring
Input impedance	Voltage:approx.2MΩ,Current:approx.4mΩ(20A),approx.80mΩ(1A)		
Rated voltage	Single phase 0-600V		
Rated current	1A/20A	20A	
Voltage range	6V~600V		
Current range	10mA~1A/20A	200mA~20A	
Voltage/current accuracy	±(0.1% × display + 0.1% × range);(DC,45Hz≤f≤1kHz)		±(0.1% × display + 0.1% × range);(45Hz≤f≤65Hz)
Active power accuracy	±(0.1% × display + 0.1% × range);(DC,45Hz≤f≤1kHz)		±(0.1% × display + 0.1% × range);(45Hz≤f≤65Hz)
Active power range	22mW(PF=0.01)~4.4kW(PF=1)@220V(1A/20A);4.4W(PF=0.01)~4.4kW(PF=1)@220V(20A);		
Active power resolution	0.01W		
Power factor accuracy	±(0.01～1) ,Resolution:0.001	±(0.1～1),Resolution:0.001	
Frequency range	DC,45Hz≤f≤4kHz		45Hz≤f≤65Hz
Frequency accuracy	±(0.1% × display) (voltage amplitude should be greater than 10% of range)		
Electric energy range/accuracy	0～99999MWh,±(0.1% × display + 0.1% × range)		
Electric energy counting	H:999 Min:59Sec:59,±(0.05% × display)		
Voltage/current ratio	0.1～1000.0		
Data update cycle	0.25,0.5,1[s]		
Alarm	5 groups, voltage, current, power upper/lower limit, threshold		
Control interface	RS-232 (Optional RS-485)、Switch I/O (Optional)		
Dimension	Dimension:213(W)×88(H)×300(D)mm; Opening:210(W)×85(H) mm, Foot height:15 mm		