

FR2020 Three-phase Digital Phase Voltammeter



I . Characteristic

FR2020 three-phase digital phase voltammeter, also known as multi-function three-phase digital phase voltammeter, is a high-quality, multi-function, high-precision, Intelligent, portable hand-held measuring instrument. It is widely used in electric energy measurement, electricity inspection, power inspection, meter installation, power connection and relay protection, differential detection, start-up test, industrial and mining enterprises, scientific research institutions and other departments. The instrument test is accurate, fast, simple, stable and reliable.

FR2020 three-phase digital phase voltammeter can not only directly measure AC voltage value, AC current value, phase and power frequency between voltages, currents, and voltages and currents, but also have other measurement and judgment functions. The judgment of current and capacitive circuit, checking the wiring group of the transformer, and checking whether the electric energy meter is connected correctly is an ideal instrument for grasping the power usage and checking the secondary circuit.

The FR2020 three-phase digital phase voltammeter consists of a host, a current clamp, a test lead, and a protective cover. It stores 500 sets of data at the same time, and has the function of static data storage. With historical data reading, viewing, saving, reporting, printing and other functions.

II . Technical Specification

Features	Measure three-phase AC voltage, current, phase between voltages, phase between currents, phase between voltage and current, frequency, phase sequence, active power, reactive power, apparent power, power factor, current vector sum, and identify transformer wiring groups, Inductive and capacitive circuits, test the secondary circuit and bus differential protection system, read out the phase relationship between each group of CTs in differential protection, check whether the wiring of the watt-hour meter is correct or not, and repair line equipment, etc.
Power supply	3.7V lithium rechargeable battery

Power consumption	250mA max		
Display mode	LCD color display, 72×55mm		
Meter size	Length, width and thickness: 187*119*48mm		
Jaw size	Φ8mm		
Voltage range	AC 0.00V~600V	Resolution: 0.01V	Accuracy: ±0.5%FS
Current range	AC 0.0mA~20.0A	Resolution: 0.1mA	Accuracy: ±0.5%FS
Phase range	0.0°~360.0°	Resolution: 0.1°	Accuracy: ±1°
Frequency range	45.00Hz~65.00Hz	Resolution: 0.01Hz	Accuracy: ±0.5Hz
Active power range	0.0W~12kW	Resolution: 0.1W	Accuracy: ±(3%rdg+3dgt)
Reactive power range	0.0W~12kVAR	Resolution: 0.1VAR	Accuracy: ±(3%rdg+3dgt)
Apparent Power Range	0.0W~12kVA	Resolution: 0.1VA	Accuracy: ±(3%rdg+3dgt)
Power factor range	-1~+1	Resolution: 0.001	Accuracy: ±0.03
Current vector sum	0mA~60.0A		
Phase sequence	Positive phase: U1, U2, U3 or I1, I2, I3 cursors flash sequentially from left to right Inverted: U1, U2, U3 or I1, I2, I3 cursors flash sequentially from right to left		
Detection rate	About 2 seconds/time		
Data retention	During the test, press the HOLD key to keep the data, and the "HOLD" symbol will display		
Data storage	500 groups		
Silicone protective cover	Have		
USB interface	USB interface, the stored data can be uploaded to the computer, which is convenient for analysis and management of data		
Automatic shut-down	The meter shuts down after about 15 minutes of inactivity		
Backlight function	Yes, suitable for dark places and night use		
Voltage detection	When the battery voltage is lower than 3.2V, the low battery voltage symbol will be displayed to remind you to charge in time		
Instrument quality	Host: 380g (with battery)		
	Needle-nose current clamp: 180g×3		
	Test line: 190g		
Voltage test lead length	1.5m		
Current clamp wire length	2m		
Working temperature and humidity	-10℃~40℃; below 80%Rh		
Storage temperature and humidity	-10℃~60℃; below 70%Rh		
Input resistance	Test voltage input impedance: 1MΩ		
Pressure resistance	Withstand 1000V/50Hz sine wave AC voltage between instrument circuit and enclosure for 1 minute		
Isolation	Between instrument line and shell ≥100MΩ		
Structure	Shell insulation		
Suitable for safety	IEC61010-1 CAT III 600V, IEC61010-031, IEC61326, pollution degree 2		

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III. Packing List

Instrument	1 set
Current clamp	3
USB communication cable	1
Monitoring software (CD-ROM)	1 piece
Instrument box	1
Charger	1
Test line	4 (1 each of yellow, green, red and black)
Manual, Warranty	1 set