

## S230D 3ph Multi-Function PM (L-Clamp)



- More than a power meter
- Versatile
- 3 phase AC system
- Simultaneous measurements of 3 channels of voltage or currents
- Vector diagram on a 3.5-inch true color LCD
- Data easy to understand
- Clamp size  $\Phi 70\text{mm}$

### DESCRIPTION

S230D is more than an electric power meter. Combining the functions of a clamp meter, phase sequence detector, and digital power meter, it is an ideal instrument for efficient power quality inspections. The instrument is tailored to conduct measurements of a 3 phase AC power system, which has 3 current clamps and 4 test leads. In addition, not only can it be used for measurements of frequency, phase sequence, voltage, current, the phase between voltages, the phase between currents, and phase between current and voltage of a 3 phase AC system, it can also be used to measure active power, reactive power, apparent power, power factor, current vector and, identify vector group of transformers, differentiate inductive and capacitive circuits, test the secondary circuit and differential busbar protection

systems, determine the phase relationship between the differential protection CT groups and verify the configuration of the watt-hour meter.

### APPLICATION


Besides effectively performing basic tasks like measuring power and power factor, S230D offers the ease of use, portability, and flexibility needed to resolve most power issues in commercial, industrial, and residential settings. It is especially suitable for electrical parameter testing of high-power three-phase motors, electric energy billing systems, and relay protection systems.

### SPECIFICATIONS

<b>Functions</b>	It can measure the frequency, phase sequence, voltage, current, the phase between voltages, the phase between currents and phase between current and voltage, active power, reactive power, apparent power, power factor, current vector and, identify vector group of transformers, differentiate inductive and capacitive circuits, test the secondary circuit and differential busbar protection systems, determine the phase relationship between the differential protection CT groups, and verify the configurations of the watt-hour meter
<b>Power</b>	DC 7.4V, 3000mAh rechargeable Li-battery, USB port, can work for up to 10h when fully charged
<b>Rated Current</b>	Approx. 180mA Max
<b>Display Mode</b>	3.5-inch true color LCD display
<b>Dimension</b>	207mm×101mm×45mm
<b>Jaw Size</b>	$\Phi 70\text{mm}$
<b>Sampling Rate</b>	Approx. 3 times/sec
<b>Measurement Range</b>	AC Voltage: 0.00V~600V
	AC Current: 0.000mA~500A
	Phase Position: 0.0° ~ 360.0°
	Frequency: 45.00Hz ~ 65.00Hz
	Active Power: 0.0W~600kW
	Reactive Power: 0.0W~600kVAR
	Apparent Power: 0.0VA~600kVA
Power Factor: -1 ~ +1	
Current Vector sum: 0.000A~3000A	

<b>Resolution</b>	Voltage: AC 0.01V
	Current: AC 0.001A
	Phase Position: 0.1°
	Frequency: 0.01Hz
	Active Power: 0.1W
	Reactive Power: 0.1VAR
	Apparent Power: 0.1VA
	Power Factor: 0.001
	Current Vector Sum: AC 0.001A
	<b>Accuracy</b> (under reference conditions)
Current: ±(0.5% range)	
Phase: ±1° (phase error under working conditions: 0.010A~500A is ±3°: below is 0.010A±5°; when the current value is lower than 5mA, to ensure the accuracy of current-to-current phase measurement, please do not perform voltage measurements. Similarly, during the phase test of voltage versus current, to ensure the accuracy of the measurement, the voltage should be no less than 5V and the current should be no less than 5mA)	
Active Power: ±(1.0% range)	
Reactive Power: ±(1.0% range)	
Apparent Power: ±(1.0% range)	
Frequency: ±(1.0% range)	
Power factor: ±0.03	
Positive Phase Sequence: U1, U2, U3 or I1, I2, I3 cursor flashes from left to right in sequence	
Negative Phase Sequence: U1, U2, U3 or I1, I2, I3 cursor flashes from right to left in sequence	
<b>Phase Sequence</b>	
<b>Detection Rate</b>	2 seconds interval
<b>Data Hold</b>	Press the HOLD key to lock and save data, the "HD" symbol will be displayed
<b>Data Storage</b>	99 sets
<b>Charge Port</b>	USB
<b>Automatic Shutdown</b>	The device turns off automatically if 15min without operation to reduce power consumption
<b>Backlight</b>	Yes, brightness is adjustable
<b>Low Battery Warning</b>	When the battery voltage is low, the low battery sign will be displayed, please charge the battery when possible, otherwise, the device will turn off in 10 seconds
<b>Weight</b>	Main Unit: approx. 447g (including battery)
	Current Clamp: approx. 556g ×3
	Testing Leads approx. 162g ×2
	Total Weight: approx. 4.6kg
<b>Test Leads Length</b>	1.5m
<b>Cable Length Of Current Clamp</b>	2m
<b>Ideal Working Conditions</b>	-10 C ~ 40 C; below 80%RH
<b>Ideal Storage Conditions</b>	-10 C ~ 60 C; below 70%RH
<b>Input Impedance</b>	The test voltage input impedance: 1MΩ
<b>Withstand Voltage</b>	From the front to the back of the instrument's housing, it can withstand 1000V/50Hz sine wave AC voltage for 1 minute
<b>Insulation</b>	≥100MΩ (between the front and back end of the housing)
<b>Structure</b>	Double insulation with insulated shockproof housing
<b>Safety Standards</b>	IEC61010-1 CAT III 600V, IEC61010-031, IEC61326, Pollution class 2

### ACCESSORIES & ORDER DATA

Description	Order Code	Description	Order Code
S230D 3ph Multi-function PM (L-Clamp), 1 pc	S230D	<b>Included accessories for S230D</b>	
		Tool box, 1pc	
		Current clamp, 3 pcs	
		Test lead, 4 pcs	
		USB charger and cable, 1 set	
		Li-battery, 1 pack (within the machine)	
		Software (e-copy), 1 pc	
		User manual, Warranty card, Certificate of Conformity, 1 copy of each	

### SALES OFFICE

Email: sales@eaglotest.com  
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