

## S210B 1ph Multi-function PM



- Compact and slim design
- High accuracy
- Easy to operate/understand
- Versatile multifunction power meter

## **DESCRIPTION**

The S210B 1ph Multi-function PM is a reliable and versatile troubleshooting tool for commercial and residential electricians. The instrument uses a high-performance 32-bit embedded processor with a real-time operating system, the CPU frequency can reach up to 120MHz, and the ADC (Analog to Digital Converter) has the highest sampling rate of 1MSPS, which ensures the accuracy of the data. The meter can measure the phase, true RMS voltage, true RMS current, active power, reactive power, apparent power, power factor, 1~50th harmonic, harmonic ratio, leakage current, frequency, phase sequence, and identify between inductive and capacitive circuits all at the same time. Also, it can display in real-time the voltage and current waveform.

In addition to its slim design, it also comes with a data-hold feature to freeze the displayed value for use in confined situations where the display may be difficult to read. It is the perfect instrument for taking measurements in a packed environment.

## **APPLICATION**

The S210B is the ideal tool for use during the installation, maintenance, and checking of electrical systems and equipment.

## **SPECIFICATIONS**

Functions	The meter can measure the phase, true RMS voltage, true RMS current, active power, reactive power, apparent power, power factor, 1~50th harmonic, harmonic ratio, leakage current, frequency, phase sequence, and identify between inductive and capacitive circuits all at the same time			
Power	6LR61, 9V DC			
Measure Method	Clamp CT; true effective value method			
Jaw Size	Φ7.5mm×13mm			
Measurement	Phase Angle: 0°~360°			
	Voltage: AC 0.1V ~ 600V (Voltage frequency range: 40Hz~70Hz)			
	Current: AC 0.0mA ~ 30.0A (Current frequency range: 40Hz~70Hz)			
	Active Power: 0.00W~18.0KW			
	Reactive Power: 0.00Var~18.0KVar			
	Visual Power: 0.00VA~18.0KVA			
	Active Electric Energy: 0.0Wh~9999KWh			
	Reactive Power: 0.0VARh~9999KVARh			
	Visual Electric Energy: 0.0VAh~9999KVAh			
	50Hz Harmonic Order: 1~50 times			
	Harmonic Ratio: 0%~100%			
	Frequency: 40.0Hz~70.0Hz			
	Power Factor: -1~+1			



	Phase Angle: 1°			
	Voltage: 0.1V			
	Current: 0.1mA			
	Visual Power: 0.01VA			
	Active Power: 0.01W			
	Reactive Power: 0.01Var			
Resolution	Visual Power: 0.1VAh			
	Active Power: 0.1Wh			
	Reactive Power: 0.1VARh			
	Harmonic Ratio: 1%			
	Frequency: 0.1Hz			
	Power Factor: 0.01			
	Phase: ±2° (phase error under working conditions: 10mA ~30A is ±3°: below is 10mA ±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)			
	Voltage: ±1.5%±5dgt			
	Current: ±1.5%±5dgt			
	Active Power: ±2%±5dgt			
Accuracy	Reactive Power: ±2%±5dqt			
(23 ℃±5 ℃, below 80%RH)	Apparent Power: ±2%±5dgt			
	Active Energy: ±2%±5dgt			
	Reactive Energy: ±2%±5dgt			
	Apparent Electric energy: ±2%±5dgt			
	Harmonic Ratio (I>30mA V>30V): ±(2%+6dgt)			
	Frequency: ±1Hz			
Waveform	Power Factor: ±0.04			
	Can display 1~4 complete cycle waveforms (50Hz)			
Harmonic Wave	1~50 timesThe automatic data saving interval is turned off by default			
Data Save Interval				
Data Storage	Interval: automatic data saving interval can be set from every 1 second to 999 seconds			
Data Storage	4000 sets			
Automatic Shutdown	10min: The instrument will automatically shut down in 10 minutes (the default is 10 minutes to shut down automatically)			
	This function can be turned off			
Display	OLED			
LCD Size	35mm×21mm; display area 32mm×15.5mm			
Automatic Range Shift	The measurement range will be changed automatically based on the circuits being tested			
Sampling Rate	ADC sampling rate: 1MSPS; display rate: 10 times/sec			
Dimension	Length, width, and thickness 213mm×60mm×32mm			
Line Voltage	The cable being tested must be below 600V			
Function Switch	Press the MODE button to switch between functions			
Data Hold	Press the HOLD key to hold the data, and then press the HOLD key again to cancel			
View Data	Press the READ key to view the data, press the up and down arrow keys to browse through the stored data			
Overload Display	Exceeding measurable range: the "OL" symbol will be displayed			
Invalid Display	"" Or ""			
Low Battery Warning	The battery icon displays the real-time battery level. When the battery voltage is low, the hollow battery icon will be displayed. Please replace the battery as soon as possible			
Weight	The instrument itself: approx. 258g (including battery); the total mass is about 486g			
Working Current	Max 17mA			
Ideal Working Conditions	-10 ℃ ~40 ℃; below 80%RH			
Ideal Storage Conditions	-10 C ~ 60 °C ; below 70%RH			
Insulation Strength	2000V/RMS (between the front and rear ends of the instrument housing)			
Safety Standards	EC1010-1, IEC1010-2-032, pollution class 2, CAT    (600V)			
	125.5.5 1, 125 15 15 2 502, political states 2, O/11 III (0007)			



ACCESSORIES & ORDER DATA					
Description	Order Code	Description	Order Code		
S210B 1ph Multi-function PM, 1 pc	S210B	Included accessories for S210B			
<u> </u>	4	Tool box, 1pc			
1	1	Voltage test leads, 2 pcs (red and black)			
	I MP ME	Battery, 1 pc			
	TER	User manual, Warranty card, Certificate of Conformity, 1 copy of each			