SG3212 Series
DC Strings Meter

The Solar PV Strings Meter (DC Strings Meter) is capable of measuring 1~12 sets of strings of solar panel, and sum up the generated power & accumulated total power generation for up to 12 sets strings of solar panel. The Solar PV Strings Meter can also measure power generation of each string and real-time current, voltage and KWh which will be rotated displayed on the liquid-crystal display (LCD). Through the RS-485 or ZigBee interfaces, users can remotely control and monitor the operating status of each string PV panel and analyze the collected data on the computing control system to optimize power generating performance. The Meter has wide service range, which can endure extended range of temperature and operate in a harsh environment with high accuracy and stability.

Features

Wide Voltage：150Vdc~1,000Vdc

Low Consumption：Below 3W (incl. loop voltage measuring consumption)

Wide Temp.：-40˚C ~75˚C

High Accuracy：Energy (kWh) & Power (W, V, A) Measuring Precision
0.5%+0.5%FS(@ TA 0~40˚C); 1%+0.5%FS(@ TA -40~70˚C)

Wide Range Measurement：
Voltage Range 150V~1,000V, Precision 0.1Vdc;
Current Range 0.1A~15A, Precision 0.01A;
Power Range 0.01kW~15kW, Precision 0.001kW;
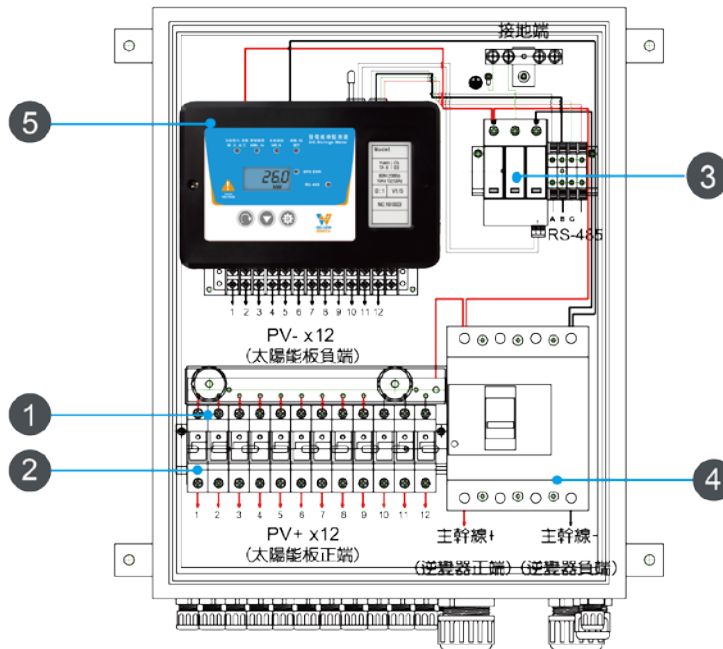Energy Range 0.1kWh~99,999kWh

Power Source：From PV Panels.

Operation and Display：With rotate and detailed information bottom as well as blue backlight LCS display, the Solar PV Strings Meter can measure and display total power generation, voltage, current and total hours of energy generation as well as the average power generation data and percentage of each string for the last 90 seconds.

Technical Specifications

Model Name		SG3212	SG3212S
Rated Current		Each 10A, Total Max. 120A	
Rated Voltage		900Vdc	
Class of Accuracy (kWh.W.V.A)	@ TA 0~40˚C	0.5%+0.5%FS	
	@ TA -40~70˚C	1%+0.5%FS	
Measure Display	Voltage	150Vdc~1,000Vdc	
	Total Current	0.1A~120A	
	Total Power	0.1kW~120kW	
	Total KWh	0.1kWh ~99,999 kWh	
	Each String Power	0.01kW~15kW	
	Each String Current	0.01A~15A	
Operation Interface		4 buttons.	
Display		5-digit LCD Display	
SPD Indicator		1 Red LED	
Setting for no. & ID		on-board setting buttons	
Comm. Interface		ZigBee	RS-485(Series)
Environment Temp.		SPD Error	
Power Consumption		3W @ Rated 900V	
Certification		CE EMC / Taiwan Electric Research & Testing Center / National Center of Supervision and Inspection on Solar Photovoltaic Product Quality (CPVT)	
Working Temp. & Humidity		-40˚C~75˚C，5%~95%RH	
LCD Display Temperature Range		-40˚C ~70˚C	
Material		V-0, 105˚C flame retardant material	
Dimension W x H x D (mm)		124 x 220 x 38	

Application Diagram

① Solar PV Fuse　　④ Disconnect Switches
② Fuse Holder　　　⑤ DC String Meter
③ SPD, Surge Protective Device

Model：SG3312-54