

GINPON PHOTOVOLTAIC PRODUCT

PV INTELLIGENT COLLECTION GATEWAY

PRODUCT OVERVIEW

PV intelligent collection gateway is an important device for optimizer and shutdown to achieve intelligent networking, collection and reporting, rapid shutdown, curve storage, alarm reporting and online upgrade. Through flexible and automatic networking mechanism and high-speed and stable communication mode, it quickly recognizes the shutdown command and quickly shuts down the PV strings and modules to ensure the safety of the PV system. At the same time, it monitors the operating status of strings and modules in real time, realizing intelligent operation and maintenance management of PV power stations.

The PVsmart collection gateway needs to be used with a kit.



(GP-G1000)



(GP-G2000)

PRODUCT ADVANTAGES

It adopts domestic high-performance Cortex-M4 core MCU as the main control chip, with a main frequency of 150MHz and fast processing speed. It can quickly recognize the state of the emergency shutdown button and quickly shut down the PV module to ensure system safety.









Adopting high performance broadband carrier communication chip, high communication rate, strong anti-interference ability, stable communication.

It adopts domestic high-reliability 4G module and communicates with the cloud platform through MQTT, with a lightweight and flexible communication protocol that is stable and reliable.

Real-time dynamic monitoring and tracking of PV systems, supporting remote switching control on cloud platforms.

Adopting flexible automatic networking mechanism, the communication system is better and more stable.

FUNCTIONAL MODULE

							
Intelligent networking	Rapid shutdown	Collecting and reporting	Curve storage	Alarm reporting	Online upgrade	Local maintenance	Magnetic ring matching

TECHNICAL PARAMETERS

Product Model		GP-G1000	
Mode of communication	Mode of communication	Southbound	HPLC
		Northbound	4G /WiFi
	Communication rate	Southbound	1600 Kbps~8 Mbps/self-adaption
		Northbound	Max downlink 10 Mbps Support WiFi 2.4G Max uplink 5Mbps 802.11b/g/n
Safety Certification	Safety		UL1741
			UL3741
			CSA C22.2 No.330-23
	EMC		NEC-2017&2020&2023690.12
			IEC/EN 62109-1
			FCC:47 CFR Part 15B
			ICES-003:2020
	IEC/EN61000-6-1/-2/-3/-4		
General parameters	Max number of supported components	200	
	Data acquisition interval	5min(Configurable)	
	Power supply	10~18V DC	
	Average power consumption	<2W	
	Number of interfaces	2*RS485	
	Serial port rate	9600bps	
	Sizes	90mm(Length)x54mm(Width)x36.5mm(Thickness)	
	Weight	<0.1kg(without kit)	
	Operating temperature	-20~+65°C	
	Humidity range	0~100%	

Product Model		GP-G2000				
Mode of communication	Mode of communication	Southbound	DC	HPLC		
		Northbound	4G	WiFi	Ethernet ACHPLC Data 485	
	Communication rate	Southbound	1600 Kbps~8 Mbps/self-adaption			
		Northbound	Maxdownlink10Mbps ·SupportWiFi2.4G · 10Mbps/ · 1600Kbps~ ·9600bps/ Maxuplink 5Mbps 802.11b/g/n 100Mbps 8Mbps/self-adaption 115200bps			
General parameters	Max number of supported components	200				
	Max number of supported strings	12				
	Data acquisition interval	5min(Configurable)				
	Power supply	10~18V DC				
	Average power consumption	<2W				
	Number of interfaces	3*RS485				
	Serial port rate	9600bps/115200bps				
	Sizes	118mm(Length)*62mm(Width)*70mm(Thickness)				
	Weights	245g				