

BLUESUN String Inverters Brochure

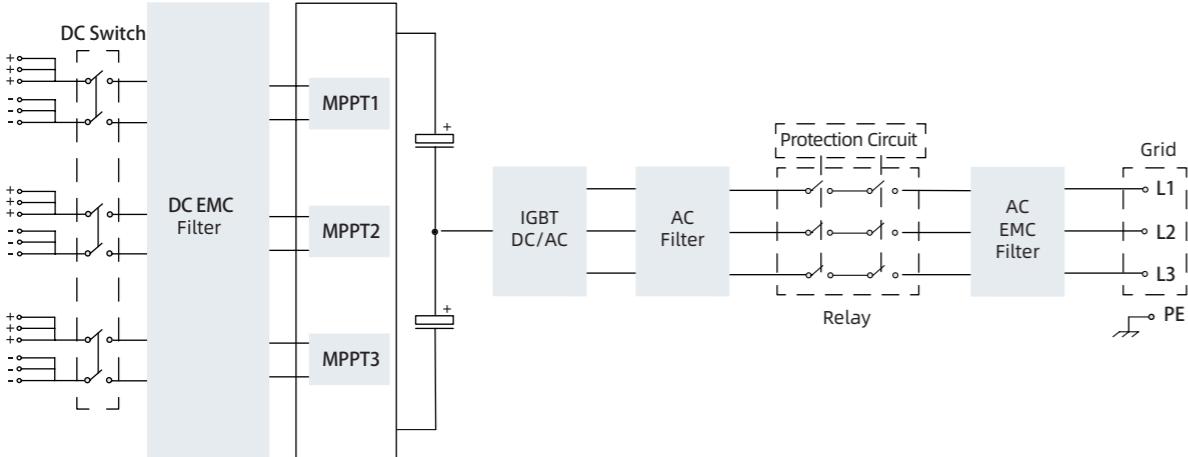
More Intelligent PV Solutions

Commercial High Power Inverter

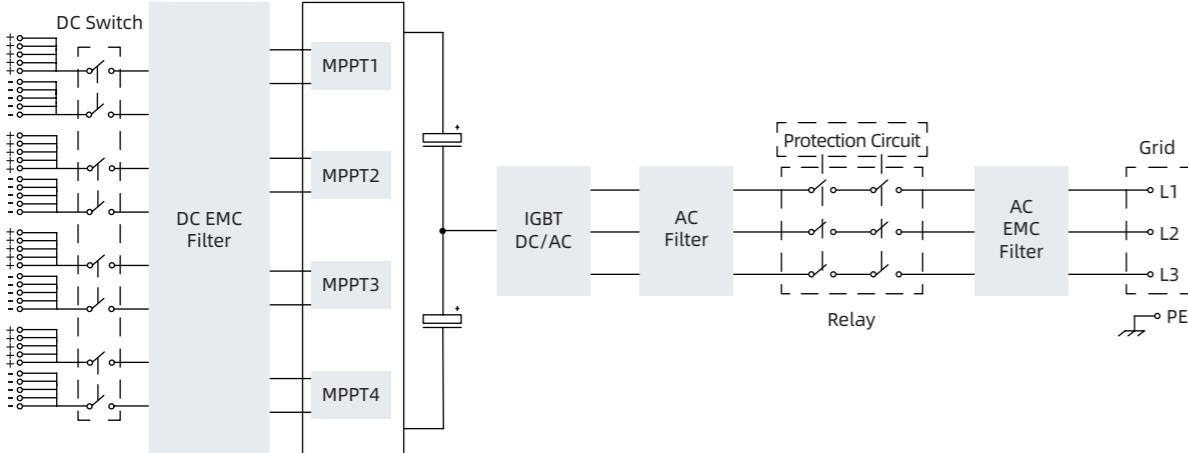


Topological Graph

36~40K



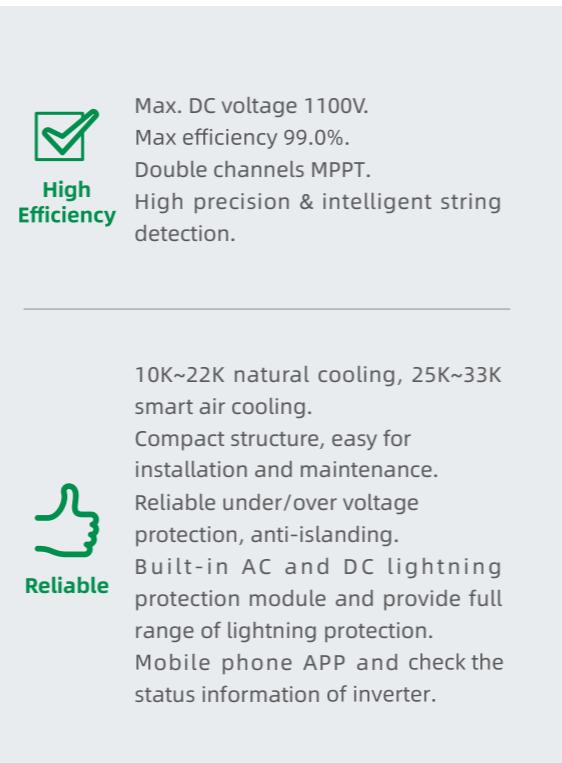
50~70K



Technical Parameters

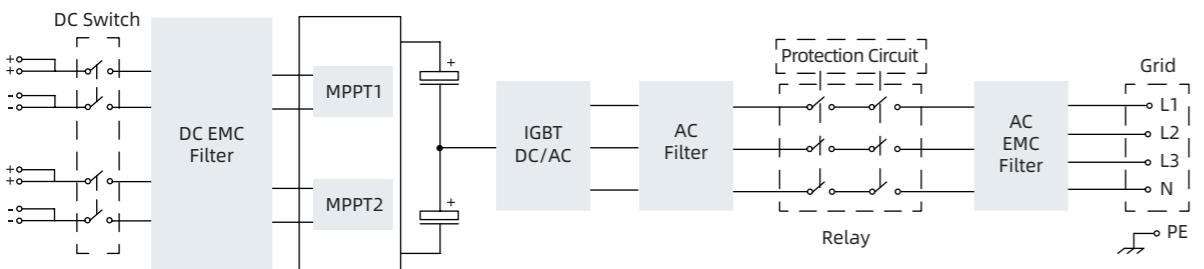
Model	BSM36K-B	BSM40K-B	BSM50K-B	BSM60K-B	BSM70K-B	BSM75K-B	BSM100K-B	BSM110K-B						
DC Input	Max. DC Voltage	1100V												
	Starting Voltage	250V												
	MPPT Voltage Range	250V ~ 1000V												
	MPPT Range Full Load	540V ~ 880V												
	Max Current / MPPT	26A / 39A	39A				65A							
	Number of DC Inputs	8	9	12	18	20								
AC Output	MPPT Number	3			4									
	Rated Output Power	36kW	40kW	50kW	60kW	70kW	75kW	100kW	110kW					
	Max. Active Power	39.6kW	44kW	55kW	66kW	77kW	82.5kW	110kW	121kW					
	Rated Output Voltage	400V (Three Phase)												
	AC Voltage Range	400V±20%												
	Rated Output Current	52.0A	57.7A	72.2A	86.5A	101A	108.2A	144A	158.8A					
	Max. Output Current	57.2A	63.5A	79.4A	95.3A	111A	119A	158.8A	174.7A					
	Rated Grid Frequency	50Hz / 60Hz												
	Power Factor	0.8 (Leading) ~ 0.8 (Lagging)												
System Parameters	THD	<3%												
	Max. Efficiency	98.97%	98.95%	99.03%	98.85%	99.00%	99.02%	99.01%	99.01%					
	European Efficiency	98.45%			98.51%			98.51%	98.52%					
	AC/DC SPD	Support												
	PV String Fault Detection	Support												
	RCD	Support												
	AC Overcurrent Protection	Support												
	Cooling System	Smart Air Cooling												
	Operating Temperature	-40°C ~ +60°C												
	Protection Level	IP65												
	Standby Power Consumption	<1W						<5W						
	Topology Structure	Transformerless												
	Operating Altitude	5000m (Derating above 4000m)												
	Display	LED + APP												
	Communication	RS485 / WiFi / GPRS												
	DC Terminator	MC4												
	AC Terminator	OT / DT (MAX 50mm ²)	OT / DT (MAX 95mm ²)				OT / DT (MAX 300mm ²)							
	Certification	IEC62109 / IEC61000 / IEC62116 / IEC61727 / EN50549 / CQC / CGC												
	Dimensions (W*H*D)	705*650*283mm						800*672*315mm						
Mechanical Parameters	Weight	<65kg		<75kg			<85kg							

Commercial Medium Power Inverter

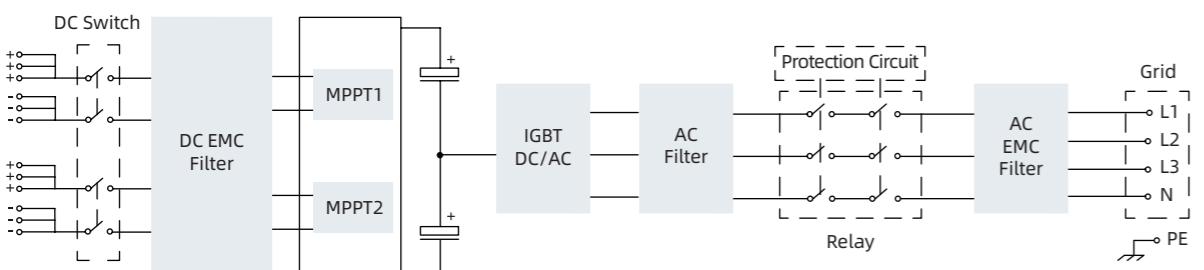


Topological Graph

20~25K



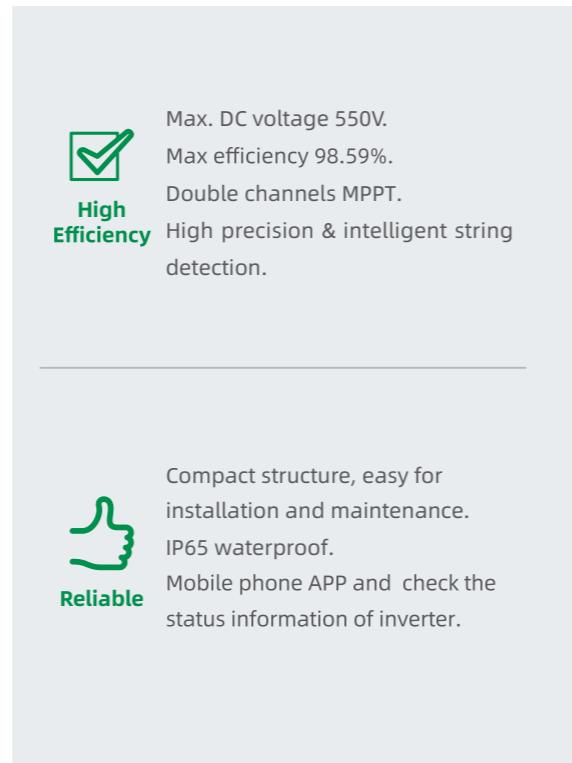
30/33K



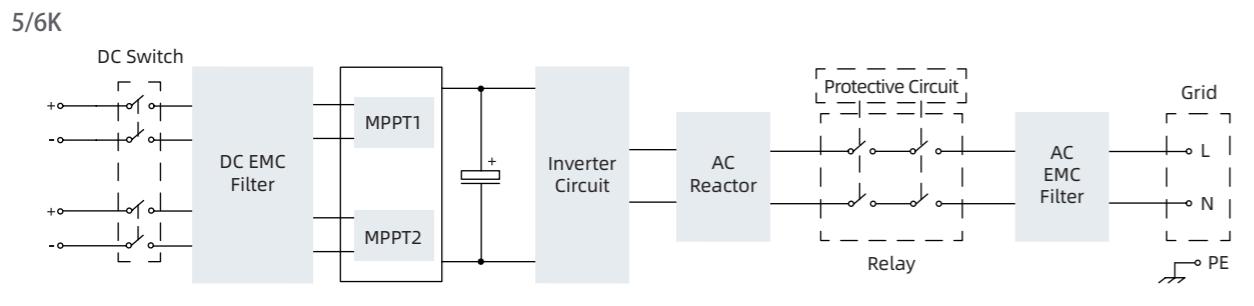
Technical Parameters

Model	BSM10K-B	BSM12K-B	BSM15K-B	BSM17K-B	BSM20K-B	BSM22K-B	BSM25K-B	BSM30K-B	BSM33K-B			
DC Input	Max. DC Voltage	1100V										
	MPPT Voltage Range	250V ~ 1000V										
	Max. Input Current of Each MPPT	13A		26A / 13A		26A		39A				
	Number of DC Inputs	2		3		4		6				
	MPPT Number	2										
AC Output	Rated Output Power	10kW	12kW	15kW	17kW	20kW	22kW	25kW	30kW	33kW		
	Max. Active Power ($\cos\theta=1$)	11kW	13.2kW	16.5kW	18.7kW	22kW	24.2kW	27.5kW	33kW	36.3kW		
	Rated Output Voltage	400V (Three Phase)										
	Operating Voltage Range	400V±20%										
	Rated Output Current	14A	17A	22A	25A	29A	32A	36A	43.3A	47.6A		
	Max. Output Current	16A	19A	24A	27A	32A	35A	39.7A	47.6A			
	Rated Grid Frequency	50Hz / 60Hz										
	Power Factor	0.8(Leading) ~ 0.8(Lagging)										
	THD	<3%										
System Parameters	Max. Efficiency	98.60%	98.61%	98.62%	98.63%	98.65%	98.94%	99.00%	98.80%			
	European Efficiency	98.30%					98.26%	98.50%	98.26%			
	AC/DC SPD	Support										
	Insulation Impedance Detection	Support										
	Residual Leakage Current Detection	Support										
	PV String Fault Detection	Support										
	Output Overcurrent Protection	Support										
	Protection Level	IP65										
	Operating Temperature Range	-40°C ~ +60°C										
	Cooling System	Natural Cooling							Smart Air Cooled			
	Standby Power Consumption	<1W										
	Topology Structure	Transformerless										
	Operating Altitude	5000m (Derating above 4000m)										
	Display	LED Indicator + APP										
	Communication	RS485 / WiFi / GPRS										
	Certification	IEC62109, IEC61000, IEC62116, IEC61727, EN50549, CQC, CGC										
Mechanical Parameters	Dimensions (W*H*D)	485*485*266mm										
	Weight	<30kg							<35kg			

Residential PV Inverter



Topological Graph



Technical Parameters

	Model	BSM5000-B2	BSM6000-B2	BSM8K-B
DC Input	Max. DC Voltage		550V	
	MPPT Voltage Range		90V ~ 500V	
	Max. Input Current of Each MPPT	13A		26A / 13A
	Number of DC Inputs	2		3
	MPPT Number	2		
AC Output	Rated Output Power	5kW	6kW	8kW
	Max. Active Power ($\cos\theta=1$)	5.5kW	6.6kW	8kW
	Rated Output Voltage		220V / 230V (Single Phase)	
	Operating Voltage Range		176V ~ 276V	
	Max. Output Current	25A	30A	34.8A
	Rated Grid Frequency		50Hz / 60Hz	
	Power Factor		0.8(Leading) ~ 0.8(Lagging)	
	THD		<3%	
System Parameters	Max. Efficiency	98.47%	98.55%	98.59%
	European Efficiency		98.0%	
	AC/DC SPD		Support	
	Insulation Impedance Detection		Support	
	Residual Leakage Current Detection		Support	
	PV String Fault Detection		Support	
	Output Overcurrent Protection		Support	
	Protection Level		IP65	
	Operating Temperature Range		-40°C ~ +60°C	
	Cooling System		Natural Cooling	
	Standby Power Consumption		<1W	
	Topology Structure		Transformerless	
	Operating Altitude		4000m (Derating above 3000m)	
	Display		LED Indicator + APP	
	Communication		RS485 / WiFi / GPRS	
	Certification		IEC62109, IEC61000, IEC62116, IEC61727, EN50549, iNMETRO,	
Mechanical Parameters	Dimensions (W*H*D)		325*380*177mm	
	Weight		<14kg	

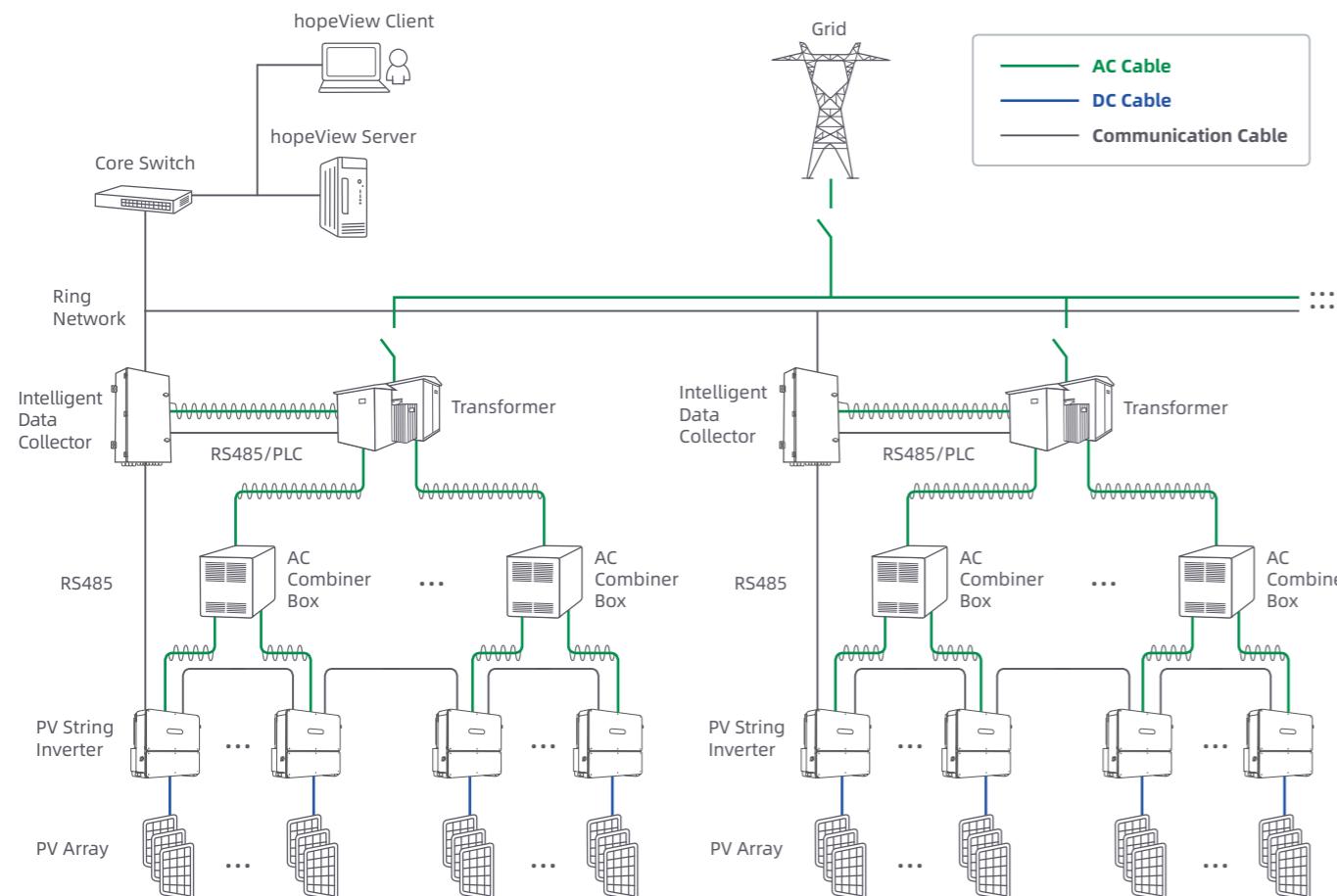
Communication Solution-Intelligent Data Collector

Product Description

The Intelligent Data Collector is mainly used for the photovoltaic network communication in the large-scale ground power plant. It integrates the functions of remote monitoring, data processing, equipment access, protocol conversion, and intelligent control and is a powerful data maintenance and acquisition device. The device and the inverter establish efficient data interaction to implement network debugging, remote monitoring, and centralized monitoring functions.



Large Ground PV Station



Performance Characteristics

Excellent Performance

- Linux Embedded Operating System
- 32-bit ARM-iMX25 series microprocessor
- Memory DDR2 64MB

Interface

- 8 DI (dry contact and isolated DI input), 4 DO interfaces (relay)
- 6 AI/AO interfaces (4 current, 2 voltage)
- 2 PT100 temperature detection, 2 CAN communication interfaces, 1 high-speed SD
- USB 2.0 high-speed interface, maximum speed 480Mbps (optional)

Communication

- PLC, RS485, Ethernet, optical fiber, etc.
- Optional wireless transmission methods such as GPRS, WiFi, ZigBee, 3G, 4G
- Communication protocols such as IEC60870-5-103, IEC60870-5-104, Modbus-RTU, Modbus-TCP, CDT

Function

- Full-featured configuration debugging tool, friendly interface, easy to use, configuration and debugging of data collector communication management, including interface configuration, protocol configuration, forwarding configuration, message monitoring, data viewing, data storage, etc.

Technical Parameters

Model		BSM2000-S
Communication Interface	Data collector	8 RS485, maximum 256 devices to be managed
	Fiber Switch	2 optical 2 electrical fiber switches
	Fiber Optic Terminal Box	4 in 24 out SC single mode fiber optic terminal box
	Operating temperature	-40°C ~ +60°C
	Storage temperature	-40°C ~ +70°C
	Humidity	5% ~ 95%, No condensation
	Altitude	≤5000m
	Protection degree	IP65
	Display	Support
	Power supply	AC220V, 50/60Hz
System parameters	Inlet and outlet	Down inlet and down outlet
	Inlet specifications	AC220V: 1.0mm outdoor UV-proof wire
	Optical cable	Single-mode fiber optic cable with diameter ≤14mm
	Size (W*D)	410*700*175mm
Mechanical parameter	Weight	≤15kg

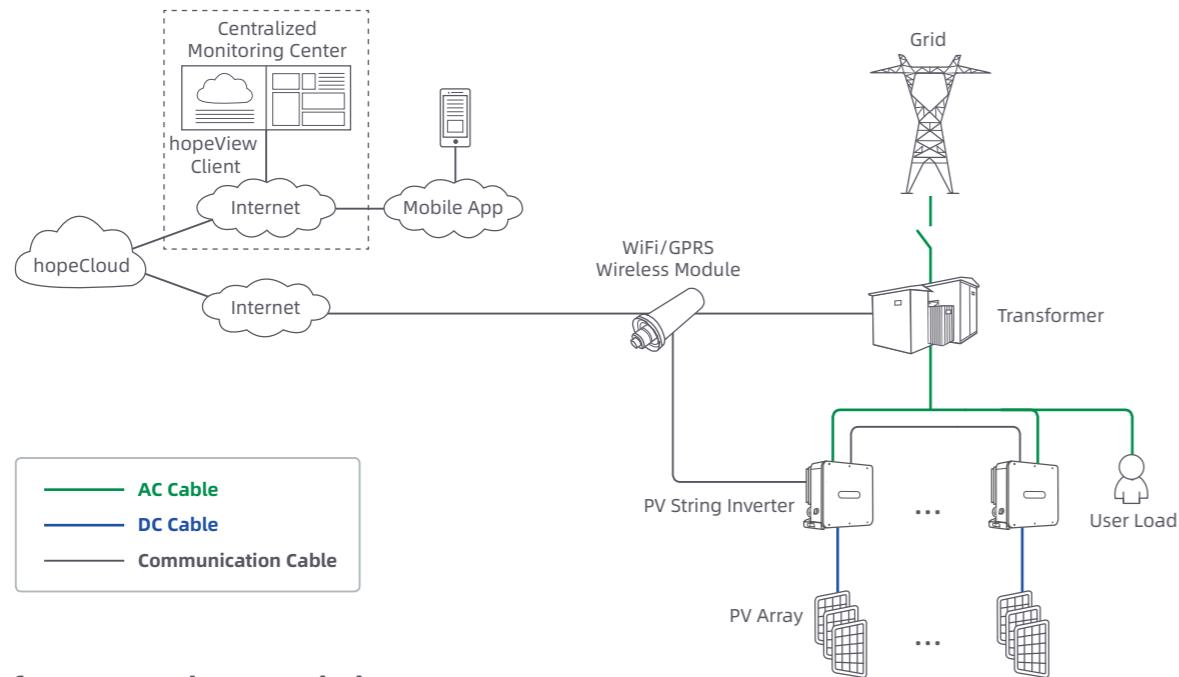
Communication Solution-WiFi/GPRS Wireless Module

Product Description

The WiFi/GPRS wireless module is used to extend the WiFi data transmission channel of the device. It supports mobile phone APP connection, monitoring, parameter settings, and can cooperate with hopeView cloud platform for effective monitoring.



For Small Household



Performance Characteristics



Easy to Use

- Support RS485 port connections, plug and play.
- Support cloud platform monitoring services.
- Support remote modification of local parameters, support remote firmware upgrade.



Flexible

- Support multiple data formats.
- Support fast adaptation of all kinds of equipment.



Stable

- Industrial components and designs, can work at high temperatures.
- Under voltage protection and built-in hardware watchdog, the system automatically restarts when fault happens.
- Real-time detection of online status, the device will never be dropped.

Technical Parameters

Model		GPRS Module
External Interface	Power Port	Power input: 5 ~ 24VDC
	Data Input Mode	RS485 (9600bps)
	Data Output Mode	GPRS
	Acquisition Baud Rate	9600 (default)
	Data Acquisition Interval	5 minutes
GPRS Parameter	Operating Frequency	GSM850 / EGSM900 / DCS1800 / PCS1900
	Antenna Gain	2.5dBi
	Maximum Transmission Rate	85.6Kbps
	Flow Card	Standardized GPRS Nano card (Including One-year usage)
Software Parameter	Application Layer Protocol	Modbus-RTU
	Network Layer Protocol	Modbus-TCP
	Parameter Setting	Remote server
General Parameters	Protection Level	IP65
	Installation Mode	Aviation connector installation
	Operating Temperature	-30°C ~ +85°C
Model		WiFi Module
External Interface	Docking Mode	DB9 / Aviation connector / RJ45 / 4Pin Socket
	Working Indicator	Power supply, networking, data transmission, data reception
WiFi Parameter	Operating Frequency	2.412GHz ~ 2.484GHz
	Wireless Standard	802.11 b/g/n
	Antenna Gain	2.5dBi (external)
	Data Rate	11Mbps@11b, 54Mbps@11g, 72Mbps@11n
	Hardware Encryption	WEP, WPA / WPA2
	Communication Distance	100m (open environment)
	Working Mode	AP + STA (coexistence mode)
Software Parameter	Supported Device Protocol	Modbus-RTU, Modbus-TCP
	Data Upload Cycle	5 minutes (default)
	Parameter Configuration Mode	APP
	Number of Clients in AP Mode	1 (preemptive)
Hardware Parameter	Data Input Mode	RS485 (9600bps)
	Data Output Mode	WiFi

Project Cases



Ukraine 15MW Solar Plant



Brazil 500kW Rooftop Project



Residential PV Project in China



Roof-top PV Project in Hunan China



Poverty Alleviation PV Project in Hebei



Rooftop PV Project in Shandong

Project Cases



Roof-top PV Project in Dingyuan,
Chuzhou, Anhui Province



Roof-top Project Xixie'er, Qidong City,
Besheng, Jiangsu Province



Solar Renewable Project in Anqiu



Street-use PV Station Lingyang, Ju county,
Rizhao City, Shandong Province



CNNC 2.8MW PV Project in Weihai,
Shandong Province



Grinding Project Shantian, Linshu
County, Linyi City, Shandong Province



12MW Dalian Roof-top PV Project in
China

