

BLUESUN String Inverters Brochure

More Intelligent PV Solutions

Bluesun Solar Co.,Ltd

Commercial Medium Power Inverter



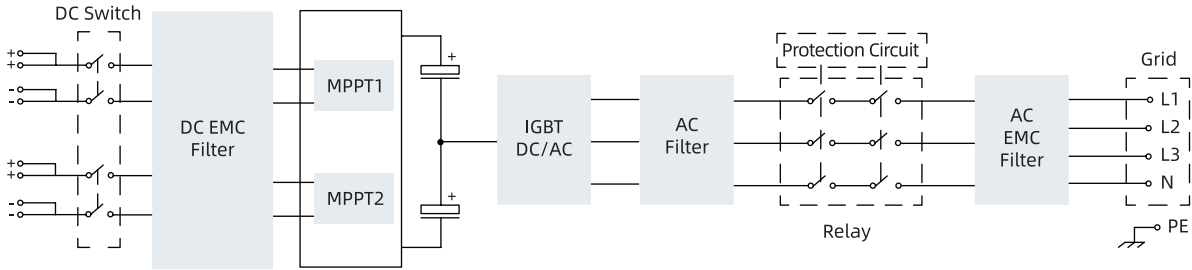
Max. DC voltage 1100V.
Max efficiency 99.0%.
Double channels MPPT.
High precision & intelligent string detection.



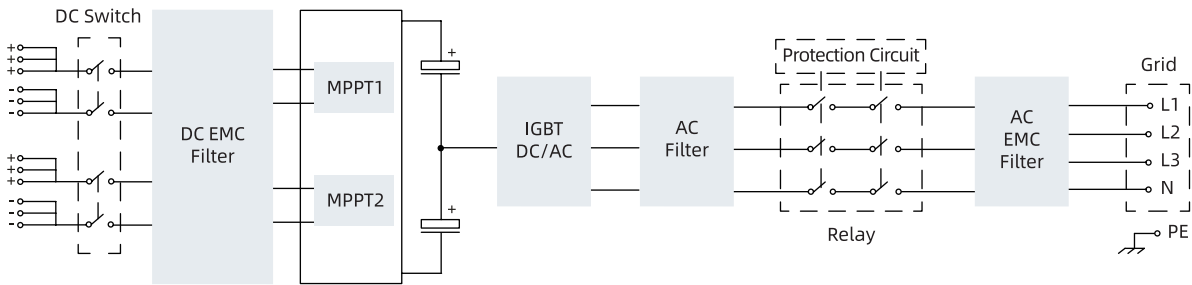
10K~22K natural cooling, 25K~33K smart air cooling.
Compact structure, easy for installation and maintenance.
Reliable under/over voltage protection, anti-islanding.
Built-in AC and DC lightning protection module and provide full range of lightning protection.
Mobile phone APP and check the status information of 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 (cosθ=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℃ ~ +60℃								
	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		

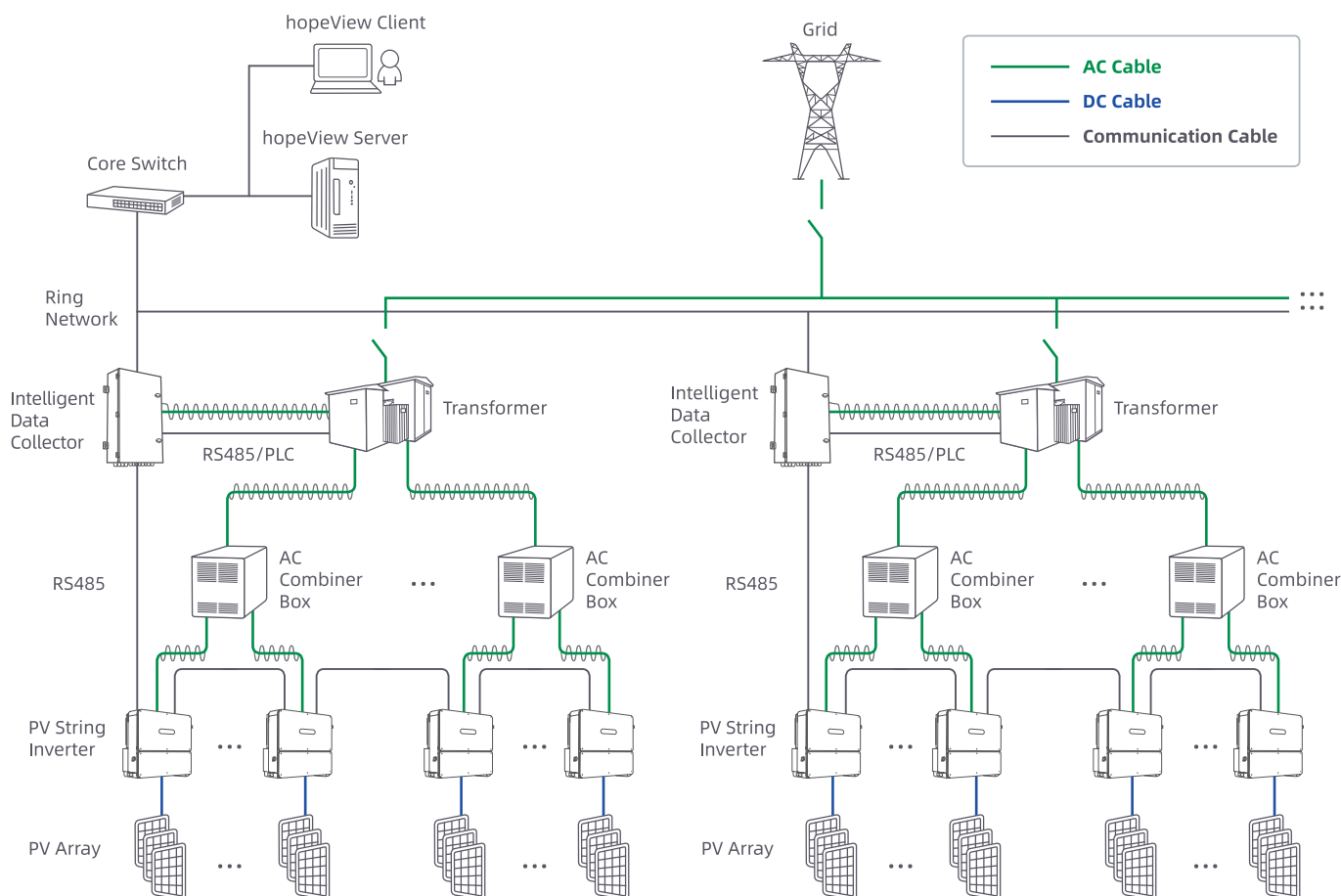
Communication Solution-Intelligent Data Collector

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
System parameters	Operating temperature	-40°C ~ +60°C
	Storage temperature	-40°C ~ +70°C
	Humidity	5% ~ 95%, No condensation
	...	≤5000m
	Protection degree	IP65
	Display	Support
	Power supply	AC220V, 50/60Hz
	Inlet and outlet	Down inlet and down outlet
	Inlet specifications	AC220V: 1.0mm outdoor UV-proof wire
Mechanical parameter	Optical cable	Single-mode fiber optic cable with diameter ≤14mm
	Size (W*H*D)	410*700*175mm
	Weight	≤15kg

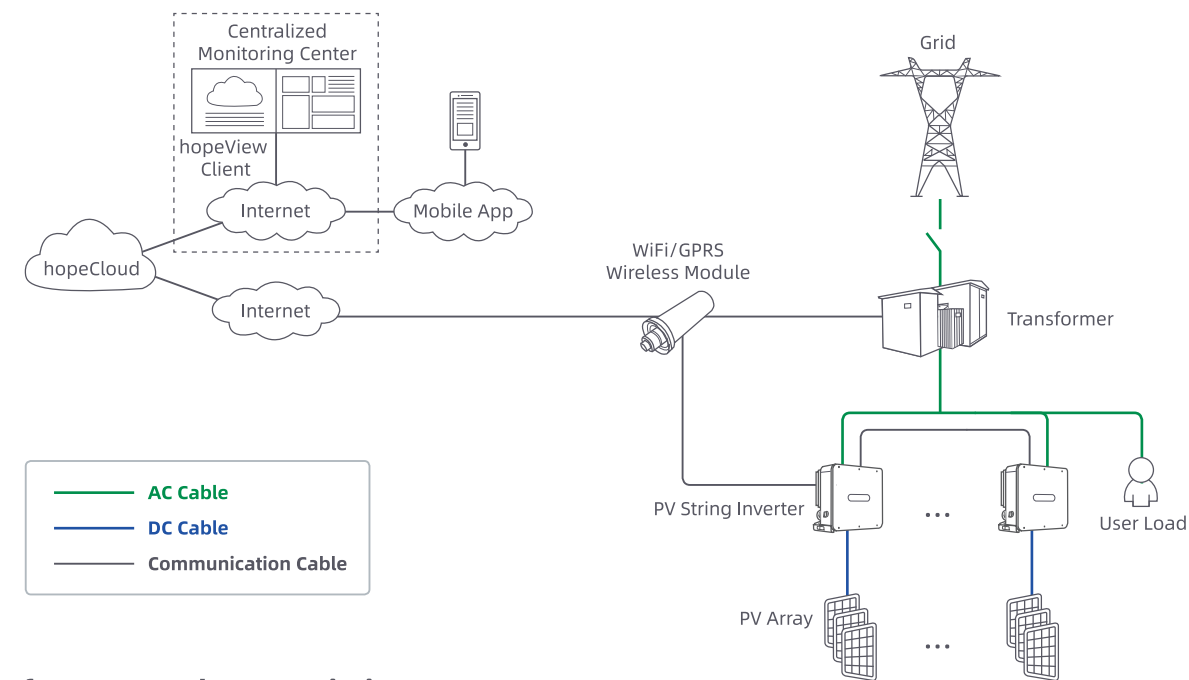
Communication Solution-WiFi/GPRS Wireless Module

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