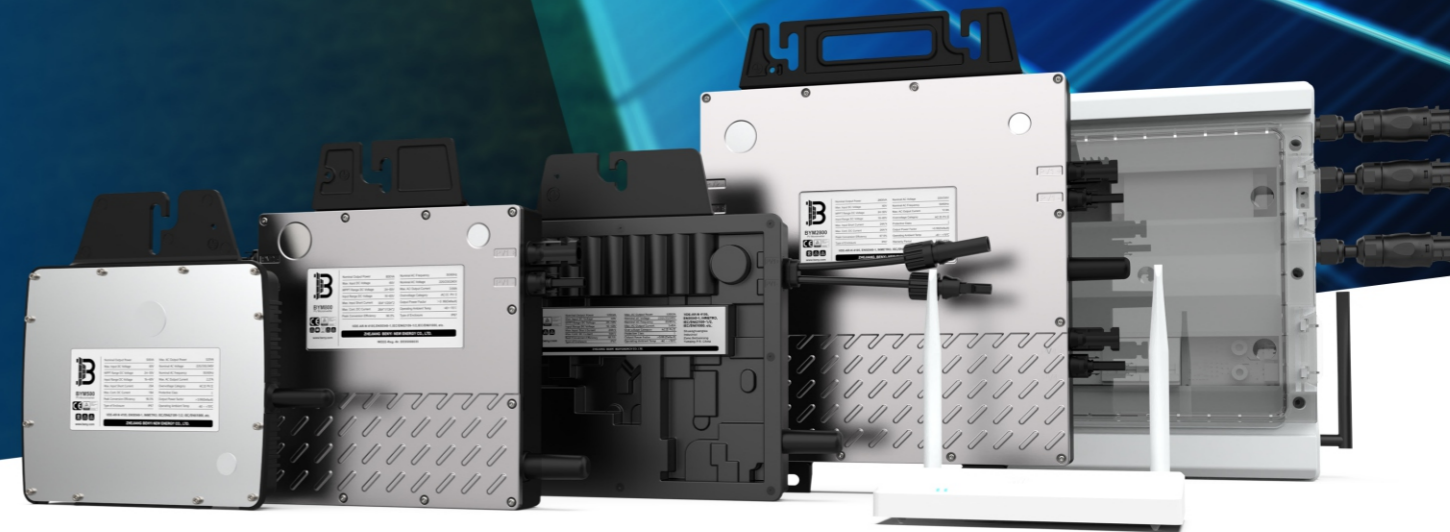




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BENY Microinverter



ZHEJIANG BENYI NEW ENERGY CO.,LTD.

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⚠️ If the models and specifications in this product catalogue change due to product updates, we will not provide prior notification.



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Catalogue



Company Introduction

As a national high-tech enterprise, BENY New Energy is concentrating on developing renewable energy for a sustainable future.

We are a leading brand annually producing hundreds of thousands of quality DC protection products and EV charging stations for complete and reliable solar photovoltaic, battery energy storage, and EV charging system.

Offering solar PV switchgear and solar combiner solutions 1000V 1500V. Newly launch solar panel RSD, solar fire safety switches for higher safety level, microinverter for solar buildings for higher efficiency.

The newest EV charging and energy storage solutions are compatible with solar PV power which is reliable for residential and commercial applications.



**We are Working
on a Sustainable
Future.**



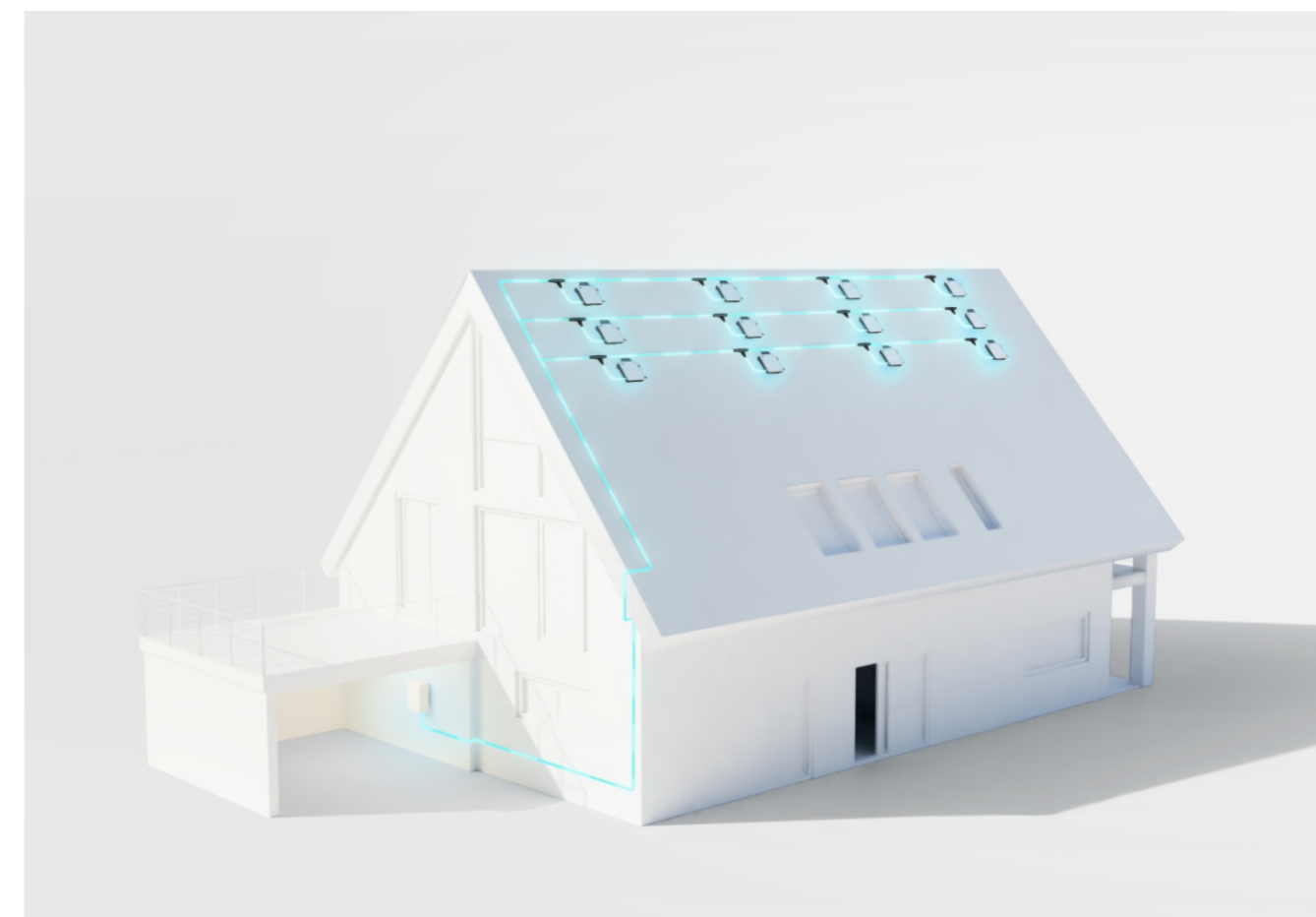
30⁺
Years of
Experience

20⁺
Million Annual
Production
Capacity



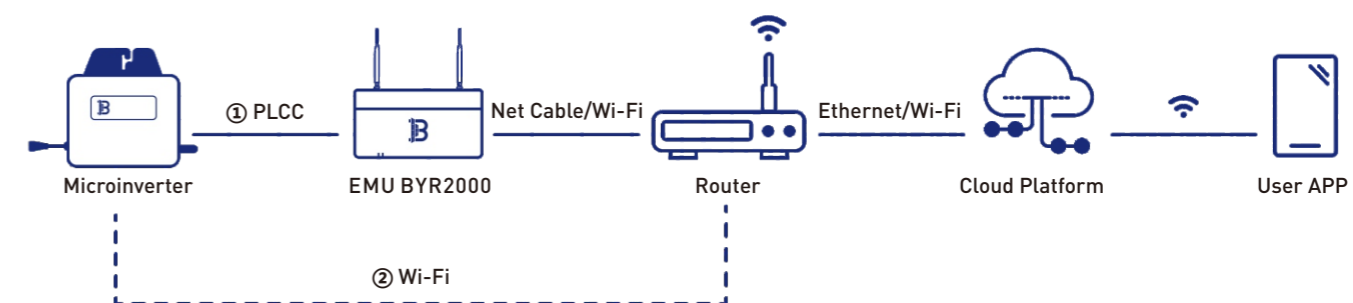
Microinverter Combination

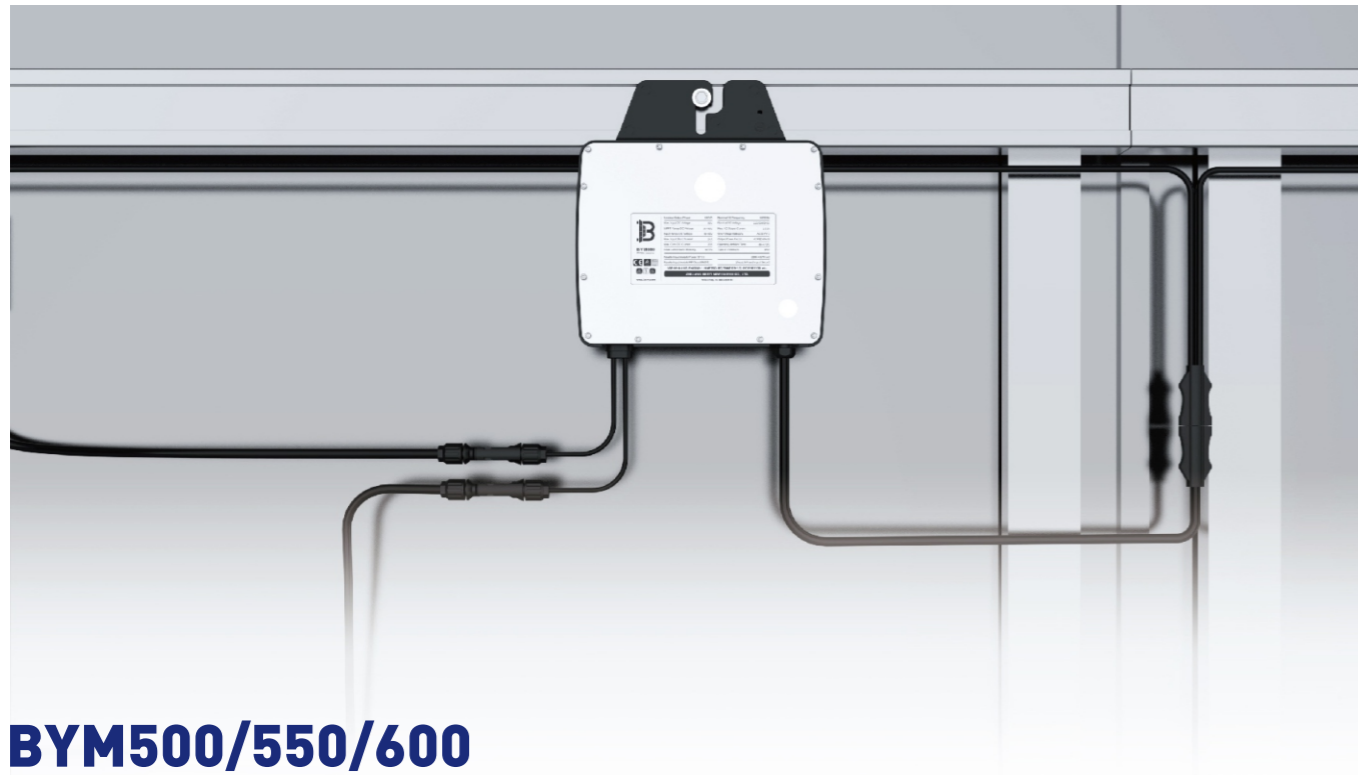
<p>SAFETY Low DC voltage invisible</p>	<p>QUALITY Components selected from world-class brands</p>	<p>OPTIMIZATION High efficiency for each module</p>	<p>PARALLEL INPUT Industry's largest continuous input current</p>
<p>FLEXIBILITY Adapts to any system size and optimizes space</p>	<p>PLUG & PLAY AC BUS design no single point of failure</p>	<p>25 YEARS 30-year design life up to 25-year warranty</p>	<p>SMART Module-level online smart monitoring</p>



Monitoring solution

Communication with BENY microinverters through PLCC/Wi-Fi enables users to manage the systems in a smart digital way.





BYM500/550/600



Adapted to 60~75-cell or 120~150 half-cell PV modules



Static MPPT efficiency 99.80%



High reliability, IP67 (NEMA 6) enclosure

Description

With the maximum output power of 520VA/570VA/600VA, microinverters connect to 1 module and enable module-level maintenance and management of the PV station by monitoring power generation of each module. Module-level data can be uploaded to the monitoring platform via BENY data transfer units through PLCC/Wi-Fi.



Input Data (DC)			
Model	BYM500	BYM550	BYM600
Recommended input power (Single)	[STC] 400~700+Wp, 60~75-cell/120~150 half-cell		
Recommended input power (Dual)	[STC] (300~450Wp) *2, 72~75-cell/144~150 half-cell (NMOT) Vmp>34V and Imp<=12A		
MPPT voltage range	24V~50V		
Operating voltage range	16V~60V		
Maximum input voltage	60V		
Max. short circuit current	20A		24A
Max. input current	18A		20A
Output Data (AC)			
Rated output power	500VA	550VA	600VA
Maximum output power	520VA (Vac>230, Vmp>34)	570VA (Vac>230, Vmp>35)	600VA (Vac>220, Vmp>33)
Rated voltage (range)	230V (176V~265V)		
Rated frequency (range)	50Hz/60Hz (46.5Hz~62Hz)		
Maximum continuous output current	2.27A	2.5A	2.73A
Maximum harmonic distortion	<4%		
Power factor	>0.99 (Default)		
Maximum connection number in one string (PLCC) (30A circuit breaker, 10AWG cable)	13 units	12 units	10 units
Maximum connection number in one string (Wi-Fi) (40A circuit breaker, 10AWG cable)	17 units	16 units	14 units
Efficiency			
Peak efficiency	96.5%		
MPPT efficiency	>99.8%		
Night power consumption	<100mW		
Other Parameters			
Communication method	PLCC/Bluetooth+Wi-Fi (Optional)		
Safety protection	Class I		
Enclosure rating	IP67		
Operating temperature	-40°C to +70°C		
Storage temperature	-40°C to +85°C		
Relative humidity	0~98%		
Transformer design	High frequency transformer, Electrical isolated		
Overvoltage class	OVC III (AC), OVC II (PV)		
Warranty period	12 / 25 years (Optional)		
Dimensions (L*W*H mm)	210*230*34		
Weight (kg)	2.39		
Safety regulations	IEC/EN 61000-6, CISPR11+A1+A2, IEC/EN 62109-1/2, EN 505491:2019 VDE-AR-N 4105:2018/DIN VDE 0124:2020, AS 4777.2 :2020, INMETRO, UTE C15-712-1/DIN VDE 0126/VFR 2019, G98, CEI 021:2020, NC RFG, NTS DAKKS .		



BYM800



Adapted to 60~75-cell or 120~150 half-cell PV modules



Static MPPT efficiency 99.80%



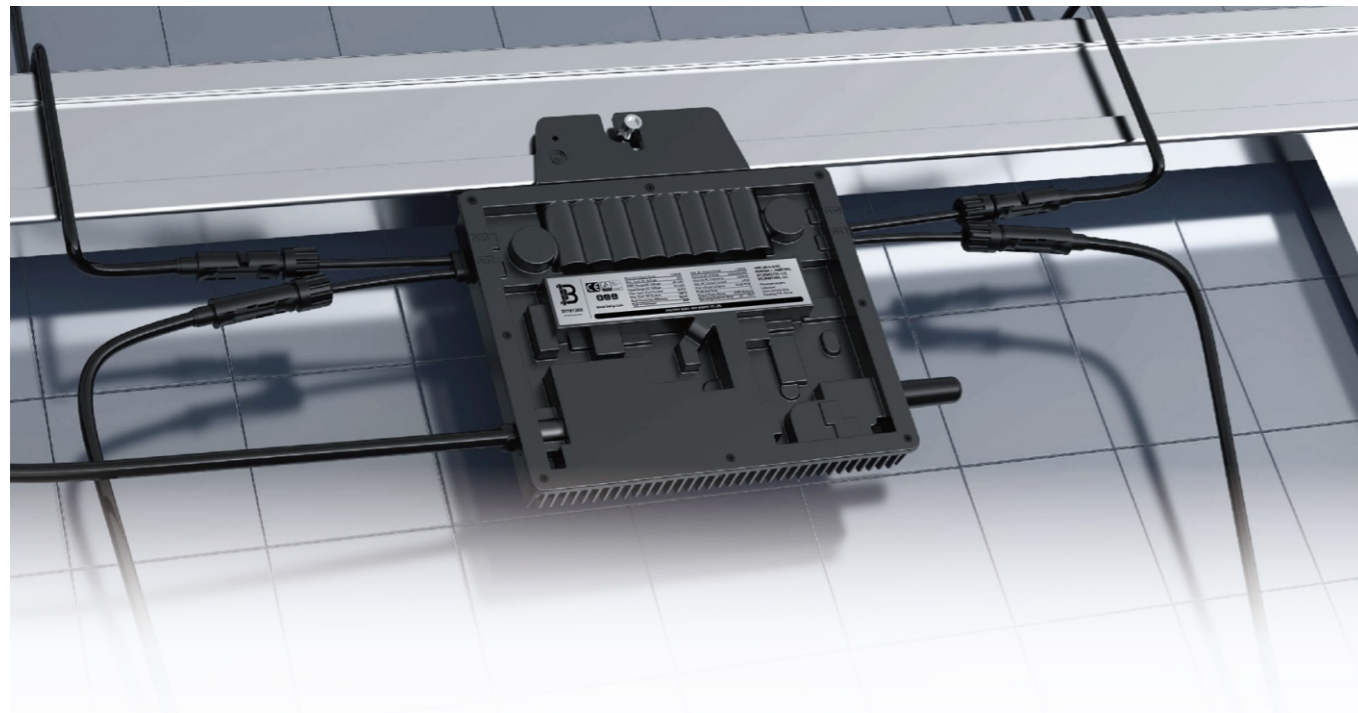
High reliability, IP67 (NEMA 6) enclosure

Description

With the maximum output power of 800VA, BENEY BYM800 microinverters can connect to 1 or 2 modules and enable module-level maintenance and management of the PV station by monitoring power generation of each module. Module-level data can be uploaded to the monitoring platform via BENEY data transfer units through PLCC/Wi-Fi.



Input Data (DC)	
Model	BYM800
Recommended input power (Single)	(STC) 600~900+Wp, 60~75-cell/120~150 half-cell
Recommended input power (Dual)	(STC) (350~600Wp) *2, 72~75-cell/144~150 half-cell (NMOT) Vmp>=32V and Imp<=15A
MPPT voltage range	24V~50V
Operating voltage range	16V~60V
Maximum input voltage	60V
Max. short circuit current	30A*1/20A*2
Max. input current	26A*1/13A*2
Output Data (AC)	
Rated output power	800VA
Maximum output power	800VA (Vac>=230, Vmp>=35)
Rated voltage (range)	230V (176V~265V)
Rated frequency (range)	50Hz/60Hz (46.5Hz~62Hz)
Maximum continuous output current	3.64A
Maximum harmonic distortion	<4%
Power factor	>0.99 (Default)
Maximum connection number in one string (PLCC) (30A circuit breaker, 10AWG cable)	8 units
Maximum connection number in one string (Wi-Fi) (40A circuit breaker, 10AWG cable)	10 units
Efficiency	
Peak efficiency	96.5%
MPPT efficiency	>99.8%
Night power consumption	<100mW
Other Parameters	
Communication method	PLCC/Bluetooth+Wi-Fi (Optional)
Safety protection	Class I
Enclosure rating	IP67
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +85°C
Relative humidity	0~98%
Transformer design	High frequency transformer, Electrical isolated
Overvoltage class	OVC III (AC), OVC II (PV)
Warranty period	12 / 25 years (Optional)
Dimensions (L*W*H mm)	268.5*215*40
Weight (kg)	3.6
Safety regulations	IEC/EN 61000-6, CISPR11+A1+A2, IEC/EN 62109-1/2, EN 50549-1:2019 VDE-AR-N 4105:2018/DIN VDE 0124:2020, AS 4777.2 :2020, INMETRO, UTE C15-712-1/DIN VDE 0126/VFR 2019, G98, CEI 0-21:2020, NC RFG, NTS DAKKS .



BYM1000/1200



Adapted to 60~75-cell or 120~150 half-cell PV modules



Static MPPT efficiency 99.80%



High reliability, IP67 (NEMA 6) enclosure

Description

With the maximum output power of 1000VA/1200VA, BENE microinverters connect to 2 modules and enable module-level maintenance and management of the PV station by monitoring power generation of each module. Module-level data can be uploaded to the monitoring platform via BENE data transfer units through PLCC/Wi-Fi.



Input Data (DC)		
Model	BYM1000	BYM1200
Recommended input power (STC)	{450~750} W*2,60~75-cell/120~150 half-cell {350~550} W*4,66~75-cell/132~150 half-cell	
MPPT voltage range	24V~50V	
Operating voltage range	16V~60V	
Maximum input voltage	60V	
Max. short circuit current	20A*2	
Max. input current	18A*2	
Output Data (AC)		
Rated output power	1000VA	1200VA
Maximum output power	1000VA (Vac≥230, Vmp≥34)	1200VA (Vac≥230, Vmp≥36)
Rated voltage (range)	230V (176V~265V)	
Rated frequency (range)	50Hz/60Hz (46.5Hz~62Hz)	
Maximum continuous output current	4.55A	5.45A
Maximum harmonic distortion	<4%	
Power factor	>0.99 (Default)	
Maximum connection number in one string (PLCC) (30A circuit breaker, 10AWG cable)	6 units	5 units
Maximum connection number in one string (Wi-Fi) (40A circuit breaker, 10AWG cable)	8 units	7 units
Efficiency		
Peak efficiency	96.5%	
MPPT efficiency	>99.8%	
Night power consumption	<100mW	
Other Parameters		
Communication method	PLCC/Wi-Fi (Optional)	
Safety protection	Class I	
Enclosure rating	IP67	
Operating temperature	-40°C to +70°C	
Storage temperature	-40°C to +85°C	
Relative humidity	0~98%	
Transformer design	High frequency transformer, Electrical isolated	
Overvoltage class	OVC III (AC), OVC II (PV)	
Warranty period	12 / 25 years (Optional)	
Dimensions (L*W*H mm)	272.9*260.9*34.5	
Weight (kg)	3.5	
Safety regulations	IEC/EN61000-6, CISPR11+A1+A2, IEC/EN 62109-1/2. EN 50549-1:2019 VDE-AR-N 4105:2018/DIN VDE 0124:2020.AS 4777.2:2020.INMETRO. UTE C15-712-1/DIN VDE 0126/VFR 2019,G98,CEI0-21:2020,NC RFG.NTS DAKKS	



BYM2000/2400/2800



Adapted to 60~75-cell or 120~150 half-cell PV modules



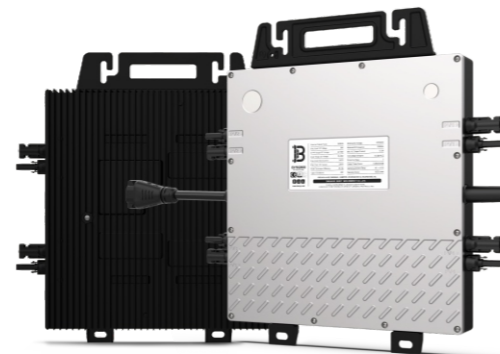
Static MPPT efficiency 99.80%



High reliability, IP67 (NEMA 6) enclosure

Description

With the maximum output power of 2000VA/2400VA/2800VA, microinverters connect to 4 modules and enable module-level maintenance and management of the PV station by monitoring power generation of each module. Module-level data can be uploaded to the monitoring platform via BENY data transfer units through PLCC/Wi-Fi.



Input Data (DC)			
Model	BYM2000	BYM2400	BYM2800
Recommended input power (STC)	[450~750] W*4 , 60~75-cell/120~150 half-cell [350~550] W*8 , 66~75-cell/132~150 half-cell		
MPPT voltage range	24V~50V		
Operating voltage range	16V~60V		
Maximum input voltage	60V		
Max. short circuit current	20A*4		24A*4
Max. input current	18A*4		20A*4
Output Data (AC)			
Rated output power	2000VA	2400VA	2800VA
Rated voltage (range)	230V (176V~265V)		
Rated frequency (range)	50Hz/60Hz (46.5Hz~62Hz)		
Maximum continuous output current	9.10A	11.0A	12.8A
Maximum harmonic distortion	<4%		
Power factor	>0.99 (Default)		
Maximum connection number in one string (PLCC) (30A circuit breaker, 10AWG cable)	3 units	2 units	2 units
Maximum connection number in one string (Wi-Fi) (40A circuit breaker, 10AWG cable)	4 units	3 units	2 units
Efficiency			
Peak efficiency	97.5%		
MPPT efficiency	>99.8%		
Night power consumption	<100mW		
Other Parameters			
Communication method	PLCC/Wi-Fi (Optional)		
Safety protection	Class I		
Enclosure rating	IP67		
Operating temperature	-40°C to +70°C		
Storage temperature	-40°C to +85°C		
Relative humidity	0~98%		
Transformer design	High frequency transformer, Electrical isolated		
Overvoltage class	OVC III (AC), OVC II (PV)		
Warranty period	12 / 25 years (Optional)		
Dimensions (L*W*H mm)	389*302*43		
Weight (kg)	7.45		
Safety regulations	IEC/EN 61000-6, CISPR11+A1+A2, IEC/EN 62109-1/2, EN 505491:2019 VDE-AR-N 4105:2018/DIN VDE 0124:2020, AS 4777.2 :2020, INMETRO, UTE C15-712-1/DIN VDE 0126/VFR 2019, G98, CEI 021:2020, NC RFG, NTS DAKKS .		

Energy Monitoring Unit



BYG1000-8S/BYG1000-24S

Advantages

- Collect and transmit operating data of BENY photovoltaic microinverter systems.
- Supports 2.4G band Wi-Fi connection or RJ45 network cable direct connection.
- Supports IP65 waterproof rating.
- Supports real-time detection of multiple microinverters.
 - BYG1000-8S: Supports real-time detection of up to 8 single-in microinverters or 2 quad-in microinverters.
 - BYG1000-24S: Supports real-time detection of up to 24 single-in microinverters or 6 quad-in microinverters.
- Support real-time viewing of local power generation status.
- Integrated installation, quick installation.

Description

BYG1000-8S/BYG1000-24S is a key accessory in the microinverter system and it is the communication gateway between the microinverter and the BENY PV background management system. Its main function is to conduct local area network (LAN) communication with the microinverter by means of power line carrier communication (PLCC), collect the working data of the microinverter and send the collected information to the BENY PV background management system through the wide area network (WAN).

Specifications of BYG1000-8S/BYG1000-24S

Model	BYG1000-8S	BYG1000-24S
PLCC		
Communication mode	PLCC (Power Line Carrier)	
Power line frequency range	45Hz~62.7Hz	
Ethernet		
Communication mode	Ethernet communication	
Interface type	RJ45 interface	
Communication rate	10/100 Mbps	
Wi-Fi		
Communication mode	Wi-Fi	
Carrier frequency band	2.412 GHz~2.484 GHz	
Communication rate	Up to 150Mbps	
General parameters		
Operating voltage	Single-phase AC 85V~265V, 50/60Hz	
Power consumption	≤5W	
Connectable sigle-channel MI	8 units	24 units
Waterproof grade	IP65	
Max. Input Current Each String	30A	30A
Max. Output Current	30A	90A
Work environment		
Operating temperature	-20°C ~ +65°C	
Storage temperature	-20°C ~ +85°C	
Operating humidity	5%~95%RH(no condensation)	
Storage humidity	1%~95%RH(no condensation)	

Energy Monitoring Unit



BYR2000

Advantage

- Collect and transmit the operating data of the BENY photovoltaic microinverter system Real-time data of each PV module is monitored in real time, while a range of remote operations can be performed.
- Support Wi-Fi connection in the 2.4G band or RJ45 cable direct connection.
- Supports mobile APP hotspot monitoring.
- Supports microinverter local monitoring.
- Small size, more flexible installation.

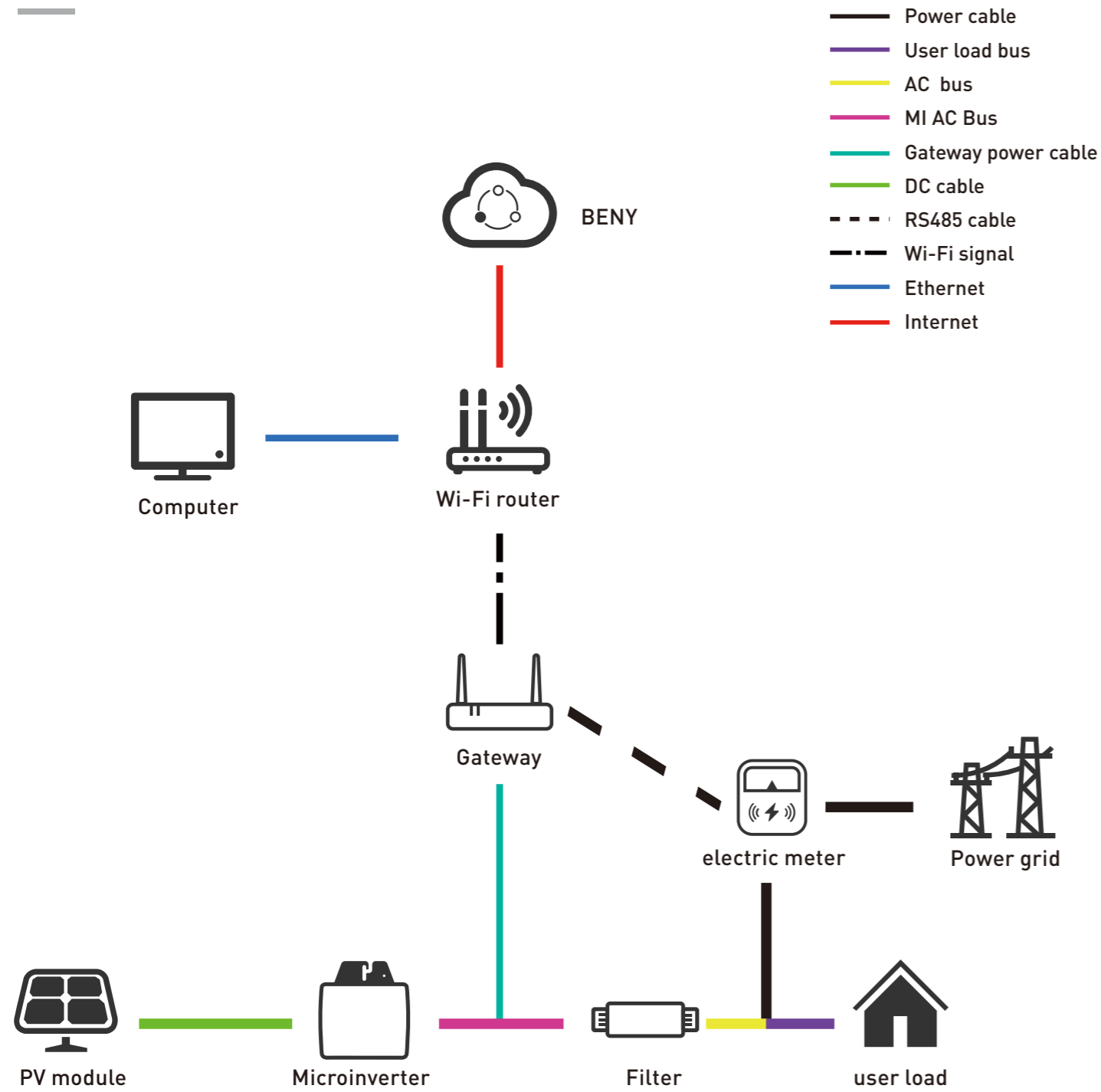
Description

BYR2000 is a key accessory in the microinverter system and it is the communication gateway between the micro inverter and the BENY PV background management system. Its main function is to conduct local area network (LAN) communication with the microinverter by means of power line carrier communication (PLCC), collect the working data of the microinverter and send the collected information to the BENY PV background management system through the wide area network (WAN).

Specifications of BYR2000

Model	BYR2000
PLCC	
Communication mode	PLCC (Power Line Carrier)
Carrier frequency	67 KHz~97 KHz
Maximum communication distance	300 m
RS485	
Communication mode	RS485
Maximum communication distance	1000 m
Ethernet	
Communication mode	Ethernet communication
Interface type	RJ45 interface
Communication rate	10/100 Mbps
Wi-Fi	
Communication mode	Wi-Fi
Carrier frequency band	2.412 GHz~2.484 GHz
Communication rate	Up to 150 Mbps
General parameters	
Operating voltage	Single-phase AC 85 V~265 V, 50/60 Hz
Power consumption	≤3 W
Operating current	0.9 mA
Waterproof grade	IP20
Connectable sigle-channel MI	24 units
Weight	430 g
Work environment	
Operating temperature	-20°C ~ +65°C
Storage temperature	-20°C ~ +85°C
Operating humidity	5%~95%RH (no condensation)
Storage humidity	1%~95%RH (no condensation)
Altitudes	2000 m
Compliance	
Standard	EN50065-1 IEC 62368-1,IEEE 802.15.4 802.11 b/g/n

System diagram-PLCC



System diagram-Wi-Fi

