



# Microinverter BENY



## ZHEJIANG BENYI NEW ENERGY CO.,LTD.

Address :Changjiang Rd, Wenzhou Daqiao Industry Park,  
Beibaixiang Town, Yueqing, Wenzhou City, Zhejiang Province, China, 325600  
TEL : +86-577-5717 7008 Email : benyi@zjbeny.com

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For the latest version of specification, please refer to [www.benyi.com](http://www.benyi.com) or contact to [benyi@zjbeny.com](mailto:benyi@zjbeny.com)  
We reserve the right to explain the terms of specification.



Type Approved  
Safety  
Regular Production  
Surveillance

[www.tuv.com](http://www.tuv.com)  
ID 1111261691

[WWW.BENY.COM](http://WWW.BENY.COM)



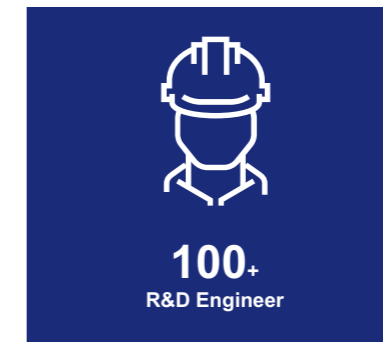
## Company Introduction

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<sup>+</sup>**  
Years of  
Experience

**20<sup>+</sup>**  
Million Annual  
Production  
Capacity



### 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

BENY single-in microinverter can connect a single photovoltaic module, and realize module-level maintenance and management of photovoltaic stations by monitoring the power generation of each module.

The power generation data of BENY microinverter system can be uploaded to the monitoring platform through PLCC/Wi-Fi communication.



#### SAFETY

Low starting voltage



#### QUALITY

Components selected from world-class brands.



#### OPTIMIZATION

Individual MPPT for each module.



#### PARALLEL INPUT

18A continuous input



#### FLEXIBILITY

Adapts to any system size and optimizes space.



#### PLUG & PLAY

AC BUS design no SPOF



#### 25 YEARS

30-year design life up to 25-year warranty



#### SMART

Module-level online smart monitoring.

## Model Selection

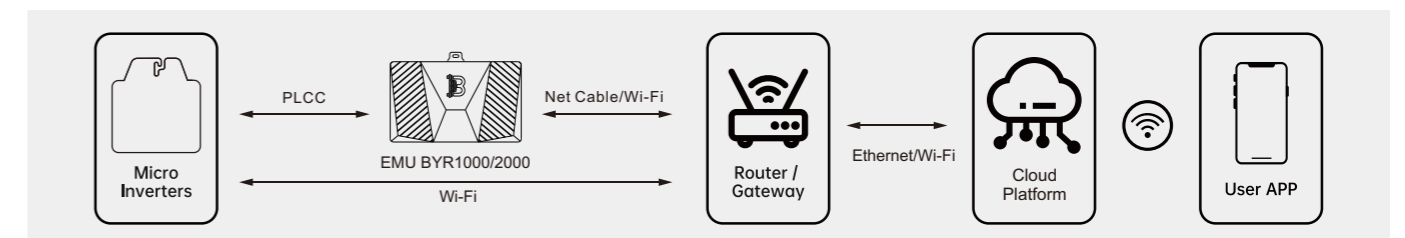
Input Data (DC)			
Model	BYM500	BYM550	BYM600
Recommended input power (STC)	(400~700)W Single, 60~75-cell/120~150-half-cell (300~450)W*2 Dual, 72~75-cell/144~150-half-cell		
MPPT voltage range	24V~50V		
Operating voltage range	16V~60V		
Maximum input voltage	60V		
Max. short circuit current	20A		24A
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	8 units (24A circuit breaker, 12AWG cable)		
Efficiency			
Peak efficiency	96.5%		
MPPT efficiency	>99.8%		
Night power consumption	<100mW		

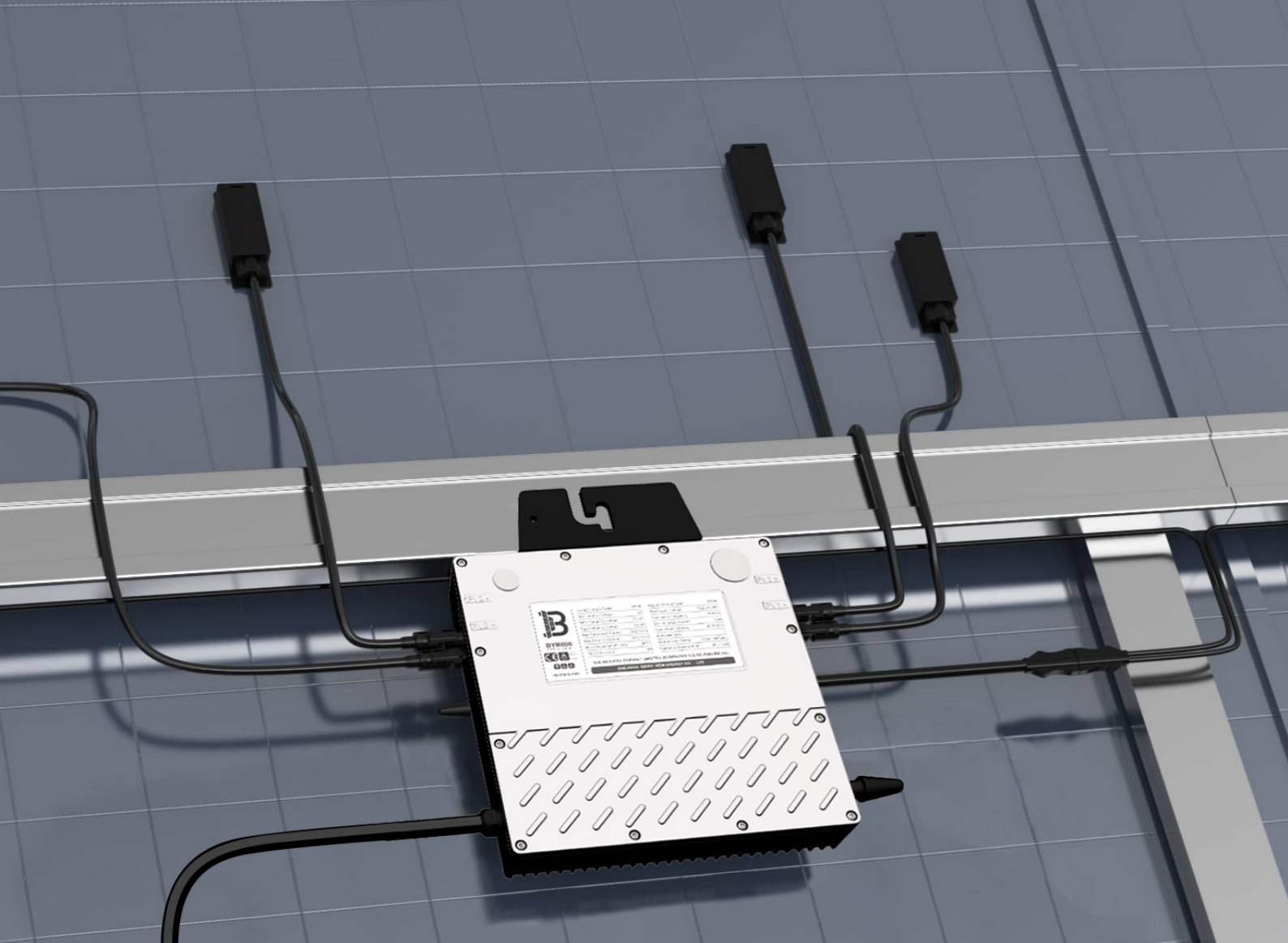
## Other Parameters

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	10years / 25years (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 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.

## Monitoring Device

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





### 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

BENY BYM800 microinverter 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.

The power generation data of BENY microinverter system can be uploaded to the monitoring platform through PLCC/Wi-Fi communication.



#### SAFETY

Low DC voltage, and invisible.



#### QUALITY

Components selected from world-class brands.



#### OPTIMIZATION

Individual MPPT for each module.



#### PARALLEL INPUT

26A continuous input



#### FLEXIBILITY

Adapts to any system size and optimizes space.



#### PLUG & PLAY

AC BUS design no SPOF



#### 25 YEARS

30-year design life up to 25-year warranty



#### SMART

Module-level online smart monitoring.

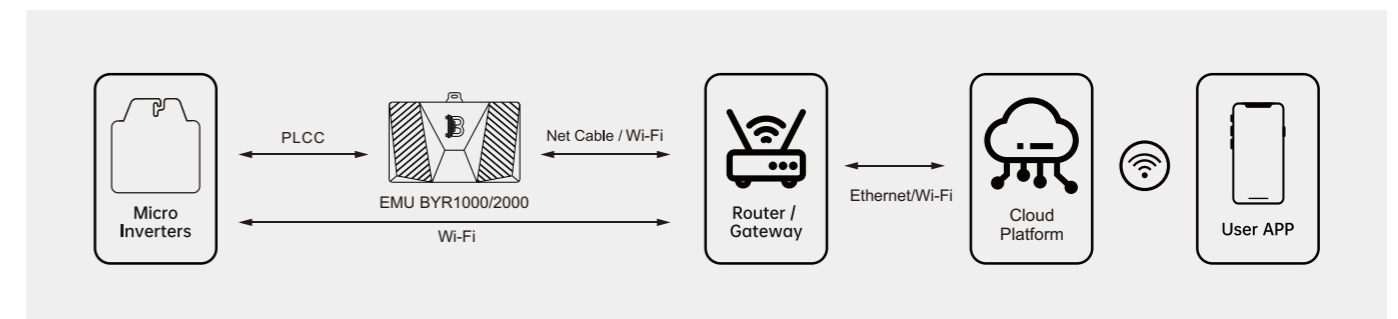
### Model Selection

Input Data(DC)	
Model	BYM800
Recommended input power (Single)	(STC)600~700+Wp , 60~75-cell/120~150-half-cell
Recommended input power (Dual)	(STC)(350~600 Wp)*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 DC input voltage	60V
Maximum short circuit input current	30A*1 / 20A*2
Maximum continuous input current	26A*1 / 13A*2
Output Data(AC)	
Rated output power	800W
Maximum output power	820VA(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	6 units (24A circuit breaker, 12AWG cable)
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
Overtoltage class	OVC III (AC), OVC II (PV)
Warranty period	10years / 25years (Optional)
Dimensions(L*W*H mm)	218*215*40
Weight(kg)	2.69
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 .

### Monitoring Device

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



### Description

BENY quad-in microinverter can connect four photovoltaic modules, and realize module-level maintenance and management of photovoltaic stations by monitoring the power generation of each module.

The power generation data of BENY microinverter system can be uploaded to the monitoring platform through PLCC/Wi-Fi communication.

### BYM2000/2400/2800



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



Static MPPT efficiency 99.80%



Peak efficiency 97.5%



High reliability, IP67 (NEMA 6) enclosure



#### SAFETY

Low starting voltage



#### QUALITY

Components selected from world-class brands.



#### OPTIMIZATION

Individual MPPT for each module.



#### PARALLEL INPUT

18A/20A continuous input



#### FLEXIBILITY

Adapts to any system size and optimizes space.



#### PLUG & PLAY

AC BUS design no SPOF



#### 25 YEARS

30-year design life up to 25-year warranty



#### SMART

Module-level online smart monitoring.



## Model Selection

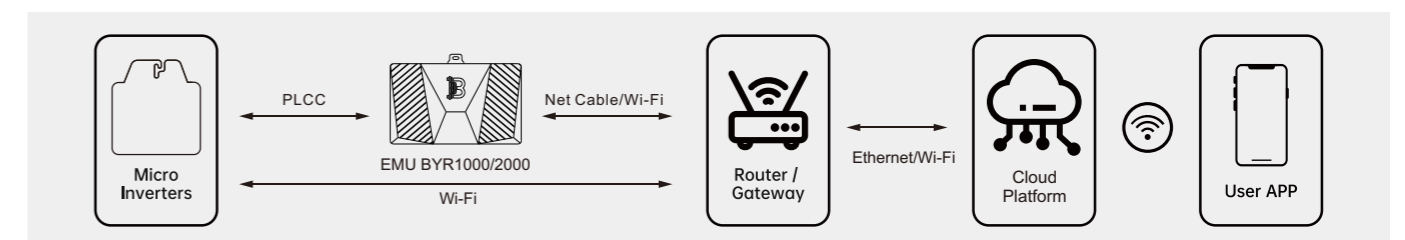
Input Data (DC)			
Model	BYM2000	BYM2400	BYM2800
Recommended input power (STC)	(450~750)W*4 , 60~75-cell/120~150-half-cell (350~550)W*8 , 66~75-cell/132~150-half-cell		
MPPT voltage range	24V~50V		
Operating voltage range	16V~60V		
Maximum input voltage	60V		
Max. short circuit current	20A*4		24A*4
Max. input current	18A*4		20A*4
Output Data(AC)			
Rated output power	2000VA	2400VA	2800VA
Rated voltage(range)	230V(196V~265V)		
Rated frequency(range)	50Hz/60Hz (46.5Hz~62Hz)		
Maximum continuous output current	9.70A	11.0A	12.8A
Maximum harmonic distortion	<4%		
Power factor	>0.99 (Default)		
Maximum connection number in one string(PLCC)	3 units (30A circuit breaker, 10AWG cable)	2 units (30A circuit breaker, 10AWG cable)	2 units (30A circuit breaker, 10AWG cable)
Maximum connection number in one string(Wi-Fi)	4 units (40A circuit breaker, 10AWG cable)	3 units (40A circuit breaker, 10AWG cable)	2 units (40A circuit breaker, 10AWG cable)
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	10years / 25years (Optional)
Dimensions(L*W*H mm)	389*302*43
Weight(kg)	7.2
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, etc.














## Monitoring Device

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



# AC Cable Customized with National Standard Connector

Country / Region	Plug type	Standards	Certification	Size
	    	IEC 60884-1, DIN VDE 0620-2-1, DIN VDE 0620-2-1/A1, DS-60884-2-D1, SFS 5610, SFS 5610, NEK 502, SS 428 08 34, NFC 61-314, NEN 1020, NBN C 61-112-1, EN 50075:1990, DIN VDE 0620.	VDE, NF CEBEC FIMKO DEMKO SEMKO KEMA KEUR TUV, S+	1.0-1.5mm <sup>2</sup>
		IEC 60884-1 CEI 23-50	TUV	1.0-1.5mm <sup>2</sup>
	 	IEC 60884-1 SN 441011-1 SN 441011-2	S+	1.0-1.5mm <sup>2</sup>
		DS 60884-2-D1:2017 IEC 60884-1:2002+A1+A2	TUV	1.0-1.5mm <sup>2</sup>
		BS 1363-1:2016+A1:2 018 SASO 2203	ASTA GCC	1.0-1.5mm <sup>2</sup>

Country / Region	Plug type	Standards	Certification	Size
	  	IEC 60884-1 SANS 60884-1 SANS 164-0 SANS 164-1 SANS 164-3	TUV	1.0-1.5mm <sup>2</sup>
	 	ABNT NBR NM 60884-1 NBR 14136	INMETRO	1.0-1.5mm <sup>2</sup>
	 	UL 817 CAN/CSA-C22.2 No. 21	E339453 UL,CUL,ETL	1.0-1.5mm <sup>2</sup>
  		AS/NZS3112 IRAM 2063 IRAM-NM 60884 IRAM 2073 IRAM-NM 60884	SAA S-Mark	1.0-1.5mm <sup>2</sup>
	 	K60884-1 KSC8305	KC	1.0-1.5mm <sup>2</sup>

# Microinverter for Balcony Solar Application

