



# Microinverter Datasheet

**BPE-M700**  
Connected to single panel

**BPE-M2000/3000**  
Connected to four panels

**BADGER POWER ELECTRONICS**

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With the maximum output power of 721W, our microinverter connect to 1 panel 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 data transfer units through PLCC/Zigbee.



**Maximum output power up to 721W/channel, adapted to 60, 66 and 72 cells PV panels**



**Static MPPT efficiency 99.80%**



**Peak efficiency 97.5% , EURO efficiency 97%**



**High reliability, IP67 (NEMA 6) enclosure, 6000 V surge protection**



#### SAFETY

Low DC voltage, and invisible.



#### QUALITY

Components selected from world-class brands.



#### OPTIMIZATION

Individual MPPT for each module.



#### FLEXIBILITY

Adapts to any system size and optimizes space.



#### PLUG & PLAY

Hand-in-hand design. Fewer add-ons.



#### 25 YEARS

Long 25 years lifetime. Up to 15 years warranty.



#### SMART

Module-level online smart monitoring.

## Technical Specifications

### 1. BPE-M700

Input Data(DC)	
PV module power range(recommended)	450W-750W, 60,66,72 Cell /(300~400W)*2, 72 Cell recommended
MPPT voltage range	24V-50V
Operating voltage range	16V-60V
Maximum DC input voltage	60V
Maximum short circuit input current	24A
Maximum continuous input current	20A
Output Data(AC)	
Rated output power	700VA
Maximum output power	721VA (Vac≥ 230, Vmp ≥38)
Rated voltage/range	230V/184-253V
Rated frequency/range	50Hz/60Hz (46.5-61)Hz
Maximum continuous output current	3.04A
Maximum harmonic distortion	<3%
Power factor	+/-0.95
Maximum connection number in one string	8 units ( 30A circuit breaker, 9AWG cable )
Efficiency	
Peak efficiency	97.5%
European efficiency	97%
MPPT efficiency	99.8%
Night power consumption	<100mW
Other parameters	
Communication method	PLCC/Zigbee Optional
Safety protection class	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 main circuit) , OVC II (PV)
Warranty period	10 years/ 25 years(Optional)
Safety regulations	VDE-AR-N 4105, IEC/EN61000,IEC/EN62109-1/2,EN50549-1/2019, TOR2019 C10/11:2019, UTE C15-712-1:2013, VFR2019

## Technical Specifications

### 2. BPE-M2000

Input Data(DC)	
PV module power range(recommended)	(450W-750W)*4 60,66,72 Cell /(300~400W)*8, 72 Cell recommended
MPPT voltage range	24V-50V
Operating voltage range	16V-60V
Maximum DC input voltage	60V
Maximum short circuit input current	20A*4
Maximum continuous input current	18A*4
Output Data(AC)	
Rated output power	2000VA
Maximum output power	2000VA (Vac ≥230, Vmp ≥38)
Rated voltage/range	230V/184-253V
Rated frequency/range	50Hz/60Hz (46.5-61)Hz
Maximum continuous output current	8.70A
Maximum harmonic distortion	<3%
Power factor	+/-0.95
Maximum connection number in one string	8 units ( 30A circuit breaker, 9AWG cable )
Efficiency	
Peak efficiency	97.5%
European efficiency	97%
MPPT efficiency	99.8%
Night power consumption	<100mW
Other parameters	
Communication method	PLCC/Zigbee Optional
Safety protection class	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 main circuit) , OVC II (PV)
Warranty period	10 years/ 25 years(Optional)
Safety regulations	VDE-AR-N 4105, IEC/EN61000,IEC/EN62109-1/2,EN50549-1/2019, TOR2019 C10/11:2019, UTE C15-712-1:2013, VFR2019

## Technical Specifications

### 3. BPE-M3000

Input Data(DC)	
PV module power range(recommended)	(450W-750W)*4,60,66,72 Cell /(300~400W)*8, 72Cell recommended
MPPT voltage range	24V-50V
Operating voltage range	16V-60V
Maximum DC input voltage	60V
Maximum short circuit input current	24A*4
Maximum continuous input current	20A × 4
Output Data(AC)	
Rated output power	3000VA
Maximum output power	3000VA (Vac≥230Vmp≥38)
Rated voltage/range	230V/184-253V
Rated frequency/range	50Hz/60Hz (46.5-61)Hz
Maximum continuous output current	13.04A
Maximum harmonic distortion	<3%
Power factor	+/-0.95
Maximum connection number in one string	2 units (30A circuit breaker, 9AWG cable)
Efficiency	
Peak efficiency	97.5%
European efficiency	97%
MPPT efficiency	99.8%
Night power consumption	<100mW
Other parameters	
Communication method	PLCC/Zigbee Optional
Safety protection class	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 main circuit) , OVC II (PV)
Warranty period	10 years / 25 years(Optional)
Safety regulations	VDE-AR-N 4105, IEC/EN61000, IEC/EN62109-1/2, EN50549-1/2019, TOR2019 C10/11:2019, UTE C15-712-1:2013, VFR2019