

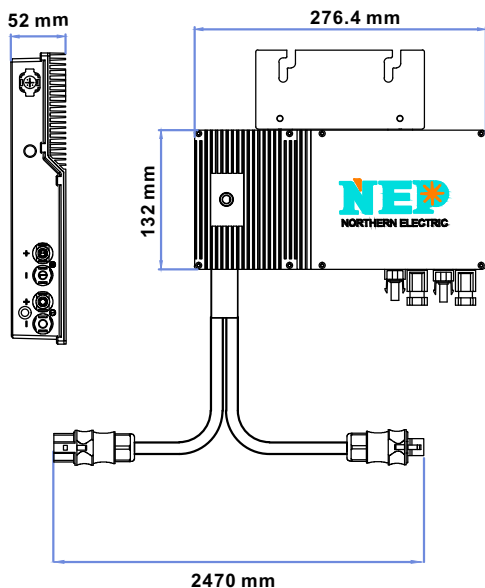
# MICROINVERTER NEP BDM-600



## General Information

The main competitive advantage of the NEP system lies in its innovative research center. The founders of NEP are recognized experts in the fields of Power Electronics, Automatic Control, Signal Processing, and Communications. The research engineers have experience working with major companies, such as Xantrex, GE Global Research and Motorola Research. The company has multiple US and global patents. The mission of the company is to develop cutting-edge clean energy technologies and provide state-of-the-art inverter to its customer.

The NEP BDM 600 is a dual solar module micro inverter. It is designed with integrated grounding for easy installation. The BDM600 features a high peak output of up to 550W. It is designed with a high peak efficiency of up to 96.4% and it comes with a 2.4 meter trunk cable. It is a bankable product with the DNV GL Technology Review Report.



## Key Features and Benefits

- \* Highly dependable and cost effective micro inverter with 25 years warranty.
- \* High peak output power up to 550W AC, recommended for dual maximum 360W solar panel.
- \* High peak efficiency with 96.4% and 99.88% of MPPT efficiency.
- \* Globally certified for Rule 21, UL1741, SAA, TUV, VDE-AR-N 4105, VDE 0126 G83/2, CEI 021, IEC61727, EN50438, CETL.
- \* Integrated grounding for easy installation.
- \* Cabinet classification NEMA-6/IP-66/IP-67 enclosure rating.
- \* Integrated touch screen monitoring and power line communication with BDG-256 gateway.
- \* Bankability available with DNV GL Technology Review Report

## NEP BDM-600 Microinverter Datasheet

### Input Data (DC)

Max Recommended PV Power	360 W x 2		
Max DC Open Circuit Voltage	60 V		
Max DC input Current	12 A x 2		
MPPT Tracking Range	22-55 V		
Isc PV (absolute maximum)	14 A x 2		
Maximum Inverter Backfeed Current to the Array (Adc)	0 ADC		

### Output Data (AC)

Peak AC Output Power	550 W		
Rated AC Output Power	500 W		
Nominal Power Grid Voltage	240 V	208 V	230 V
Allowable Power Grid Voltage	211-264 V*	183-229 V*	Configurable*
Allowable Power Grid Frequency (Hz)	59.3-60.5 Hz*		Configurable*
Total Harmonic Distortion (THD)	<3% (at rated power)		
Power Factor	>0.99% (at rated power)		
Rated Output Current	2.08 A	2.40 A	2.17 A
Nominal Frequency	60 Hz		
Maximum Output Fault Current	4.4 A peak		
Maximum Output Overcurrent Protection	10 A		
Maximum Number of Units Per Branch (20A) (All NEC adjustment factors have been considered)	7/5	6/5	7/5
Current (inrush) (Peak and Duration)	10 A		

### System Efficiency

Peak Power Efficiency	96.4%
MPPT Tracking Accuracy	99.88%
Weighted Averaged Efficiency (CEC)	95.5%
Night Time Tare Loss	0.11 W

### System Protection

Over/Under Voltage Protection	Yes
Over/Under Frequency Protection	Yes
Anti-Islanding Protection	Yes
Over Current Protection	Yes
Reverse DC Polarity Protection	Yes
Overload Protection	Yes
Protection Degree	NEMA-6 / IP-66 / IP-67

### Mechanical Data

Ambient Temperature	-40°F to +149°C (-40°C to +65°C)
Operating Temperature	-40°F to +185°C (-40°C to +85°C)
Display	LED Light
Communication	Power Line
Dimension	10.91' x 5.20' x 1.97' (277 x 132 x 50 mm)

## NEP BDM-600 Microinverter Datasheet - continue

Weight (Include AC cable)	8.8 lbs. (4.0kg)
Environment Category	Indoor and Outdoor
Wet Location	Suitable
Pollution Degree	PD 3
Overvoltage Category	II (PV), III (AC MAINS)
Product Safety Compliance	California Rule21 Certified / UL 1741 / CSA C22.2 No. 107.1 IEC / EN 62109-1 IEC / EN 62109-2
Grid Code Compliance* (Refer to the label for the detailed grid code compliance)	IEEE 1547 / VDE-AR-N 4105* / VDE V 0126-1-1/A1 / G83/2 AS 4777.2 & AS / 4777.3.EN50438

\* Grid parameter are configurable through a BDG-256 or BDG-256P3 gateway

\* All NEC required adjustment factors have been considered for AC outputs. AC current outputs will not exceed stated values for rated Output AC Current

\* NEC 2014 Section 690.11 DC Arc-Fault Circuit Protection

\* NEC 2014 Section 690.12 Rapid Shutdown of PV Systems on Buildings

\* NEC 2014 Section 705.12 Point of Connection (AC Arc-Fault Protection)

