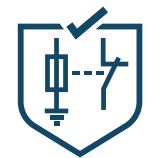


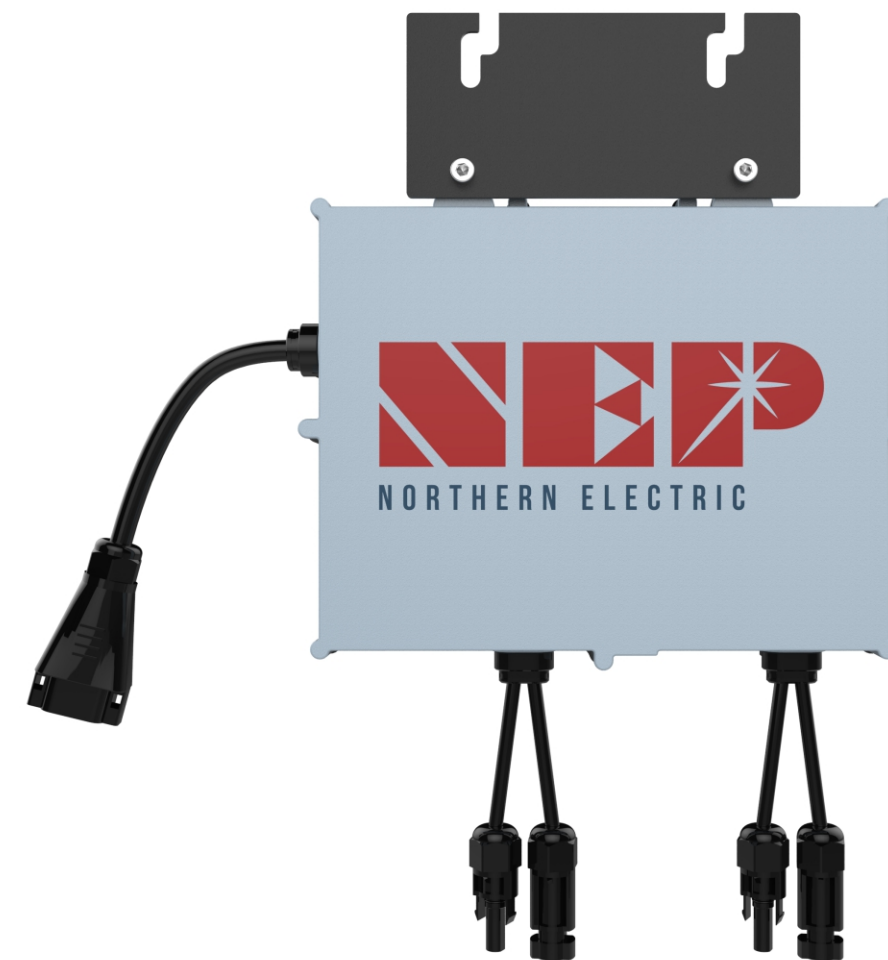


# BDM-800 MICROINVERTER

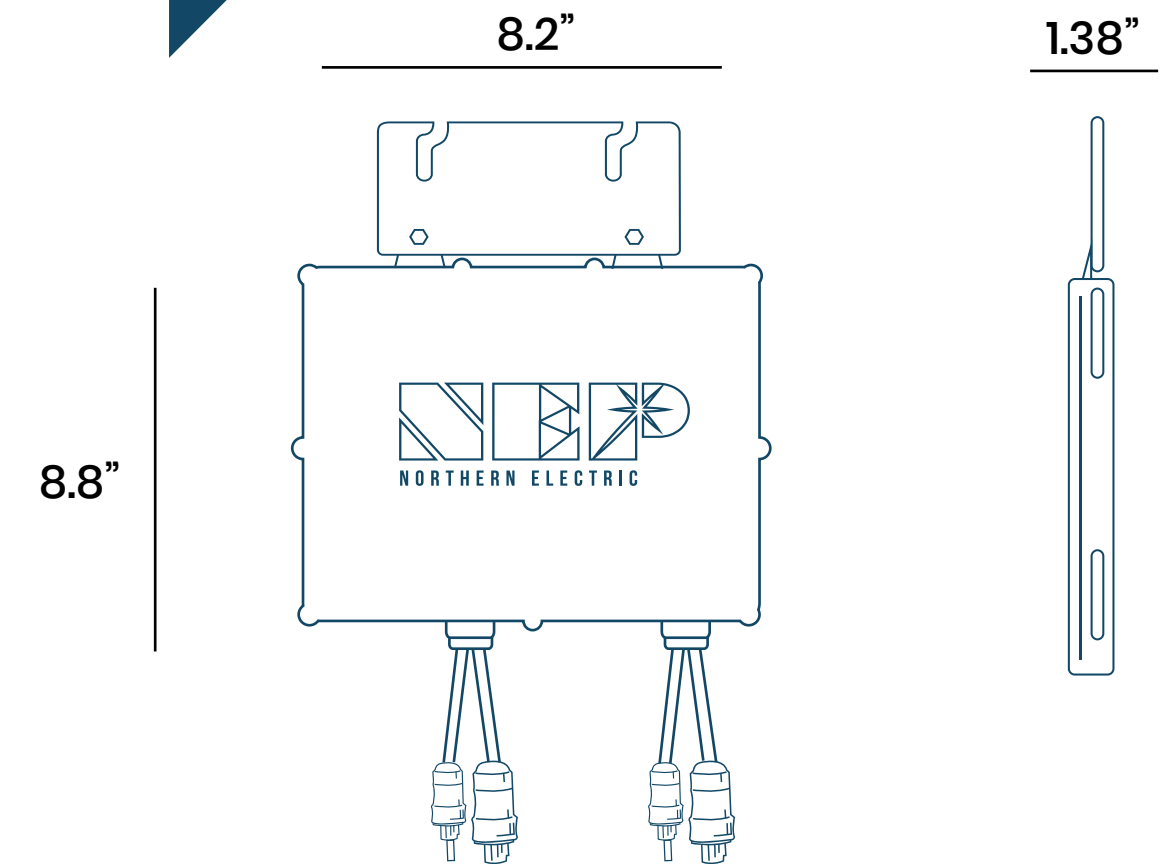
## Features



- U.S. California Rule 21 Certified
- Low cost \$/watt microinverter
- High continuous output power up to 768Wac, recommended for up to two 600W modules
- High efficiency; 96.5% CEC rating
- Globally certified for UL1741, SAA, TUV, VDE-AR-N
- 4105, VDE 0126, TOR Erzeuger Type A
- Integrated grounding for easy installation
- NEMA-6/IP-66/IP-67 enclosure rating
- Integrated monitoring and power line communication with BDG256 gateway
- Compatible with BDM-650 and BDM-550



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## Important product information

- NEP is committed to developing Clean, Affordable, Reliable and Efficient (CARE) products for our customers worldwide.
- NEP microinverters have an isolation transformer and basic isolation between the DC input and the AC output network.



# BDM-800 MICROINVERTER



|                                                                                  |                                                                                            |                                    |                                                                                |               |  |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------|---------------|--|
| <b>INPUT(DC)</b>                                                                 | Max Recommended PV Power (Wp)                                                              | 650 * 2                            |                                                                                |               |  |
|                                                                                  | Max DC Open Circuit Voltage (Vdc)                                                          | 60                                 |                                                                                |               |  |
|                                                                                  | Max DC Input Current (Adc)                                                                 | 17 x 2                             |                                                                                |               |  |
|                                                                                  | MPPT Tracking Accuracy                                                                     | >99.5%                             |                                                                                |               |  |
|                                                                                  | MPPT Tracking Range (Vdc)                                                                  | 22-55                              |                                                                                |               |  |
|                                                                                  | Isc PV (absolute maximum) (Adc)                                                            | 20 x 2                             |                                                                                |               |  |
|                                                                                  | Maximum Inverter Backfeed Current to the Array (Adc)                                       | 0                                  |                                                                                |               |  |
| <b>OUTPUT (AC)</b>                                                               | Peak AC Output Power (Wp)                                                                  | 800                                |                                                                                |               |  |
|                                                                                  | Rated AC Output Power (Wp)                                                                 | 768                                | 700                                                                            | 750           |  |
|                                                                                  | Nominal Power Grid Voltage (Vac)                                                           | 240                                | 208                                                                            | 230           |  |
|                                                                                  | Allowable Power Grid Voltage (Vac)                                                         | 211-264*                           | 183-228*                                                                       | configurable* |  |
|                                                                                  | Allowable Power Grid Frequency (Hz)                                                        | 59.3 - 60.5*                       |                                                                                | configurable* |  |
|                                                                                  | THD                                                                                        | <3% (at rated power)               |                                                                                |               |  |
|                                                                                  | Power Factor (cos phi, fixed)                                                              | -0.99>0.9 (adjustable)             |                                                                                | 0.8un>0.8ov   |  |
|                                                                                  | Rated Output Current (Aac)                                                                 | 3.2                                | 3.36                                                                           | 3.26          |  |
|                                                                                  | Current (inrush)(Peak and Duration)                                                        | 9.4A, 15us                         |                                                                                |               |  |
|                                                                                  | Nominal Frequency (Hz)                                                                     | 60                                 | 50                                                                             |               |  |
|                                                                                  | Maximum Output Fault Current (Aac)                                                         | 9.6A peak                          |                                                                                |               |  |
|                                                                                  | Maximum Output Overcurrent Protection (Aac)                                                | 20                                 |                                                                                |               |  |
|                                                                                  | Maximum Number of Units Per Branch (20A) (All NEC adjustment factors have been considered) | 5                                  | 4                                                                              | 4             |  |
|                                                                                  | <b>SYSTEM EFFICIENCY</b>                                                                   | Weighted Averaged Efficiency (CEC) | 96.50%                                                                         |               |  |
|                                                                                  |                                                                                            | Night Time Rate Loss (Wp)          | 0.11                                                                           |               |  |
| <b>PROTECTION FUNCTIONS</b>                                                      | 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             |                                                                                |               |  |
|                                                                                  | Ambient Temperature                                                                        | -40°F to +149°F (-40°C to +65°C)   |                                                                                |               |  |
|                                                                                  | Operating Temperature                                                                      | -40°F to +185°F (-40°C to +85°C)   |                                                                                |               |  |
|                                                                                  | Display                                                                                    | LED LIGHT                          |                                                                                |               |  |
|                                                                                  | Communications                                                                             | Power Line                         |                                                                                |               |  |
|                                                                                  | Dimension (W-H-D)                                                                          | 8.8"x8.2"x1.38" (268x250x42 mm)    |                                                                                |               |  |
|                                                                                  | Weight                                                                                     | 6.4 lbs. (2.9 kg)                  |                                                                                |               |  |
|                                                                                  | Environment Category                                                                       | Indoor and outdoor                 |                                                                                |               |  |
|                                                                                  | Wet Location                                                                               | Suitable                           |                                                                                |               |  |
|                                                                                  | Pollution Degree                                                                           | PD 3                               |                                                                                |               |  |
|                                                                                  | Overvoltage Category                                                                       | II(PV), III (AC MAINS)             |                                                                                |               |  |
| Product Safety Compliance                                                        | UL 1741 SB<br>CSA C22.2<br>No. 107.1                                                       | IEC/EN 62109-1<br>IEC/EN 62109-2   |                                                                                |               |  |
| Grid Code Compliance* (Refer to the label for the detailed grid code compliance) | IEEE 1547.1 - 2020                                                                         |                                    | VDE-AR-N 4105*<br>VDE V 0126-1-1/A1<br>AS 4777.2 & AS<br>TOR<br>Erzeuger Typ A |               |  |

\* Grid parameters 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

### COMPLIANCE

- \*NEC 2020 Section 690.11 DC Arc-Fault Circuit Protection
- \*NEC 2020 Section 690.12 Rapid Shutdown of PV Systems on Buildings
- \*NEC 2020 Section 705.12 Point of Connection (AC Arc-Fault Protection)
- \*Rule-21 Certified
- \*HECO Certified
- \*UL1741 SB