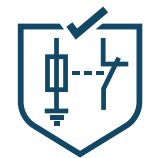
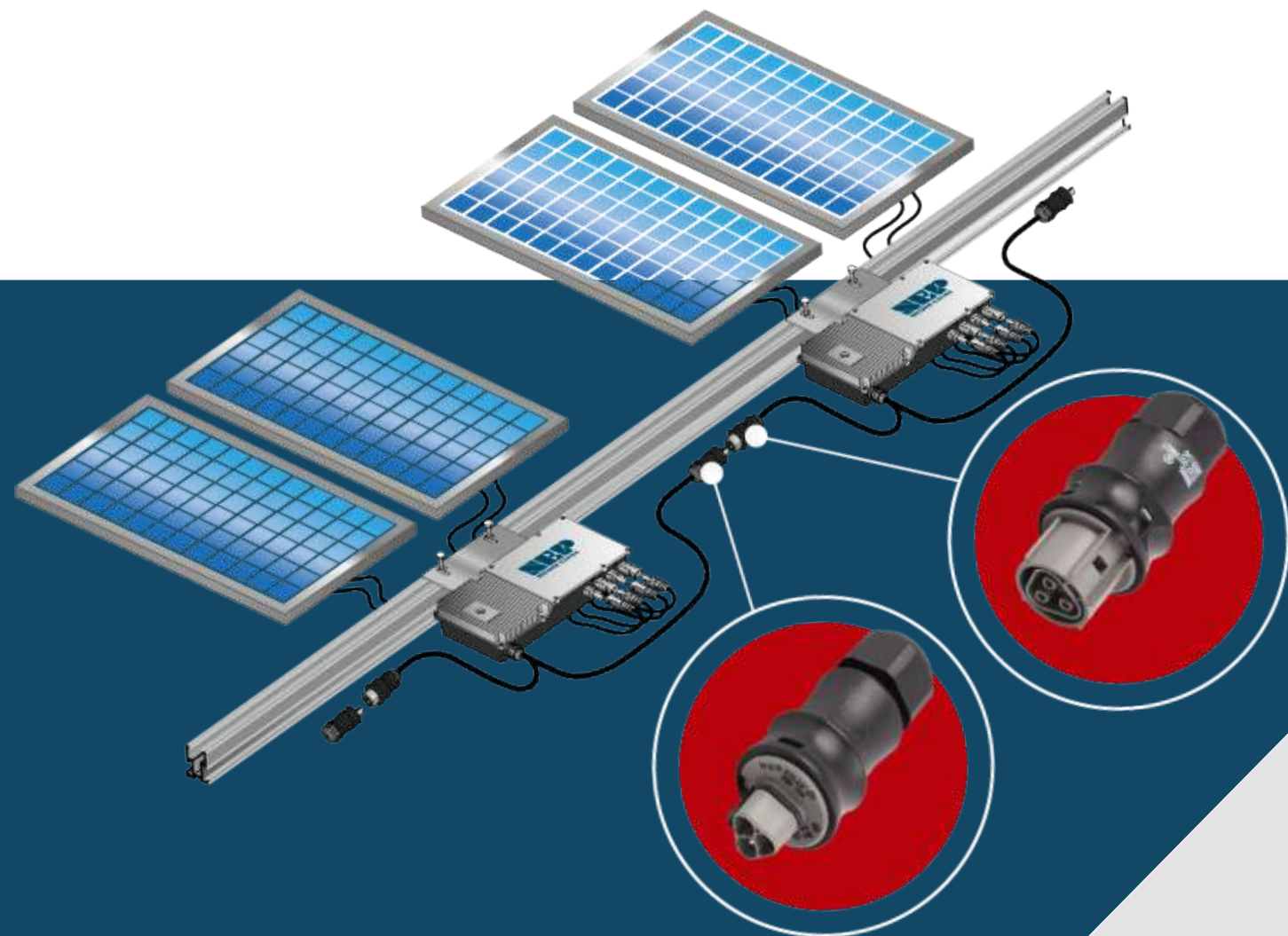


# BDM-600X MICROINVERTER

## Features



- Low cost \$/watt micro inverter
- High continuous output power up to 580Wac, recommended for dual max 450W solar panel
- High efficiency with 95.5% CEC
- Globally certified for UL1741, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEL 021, IEC61727, EN50438, ABNT NBR 6149/16150
- Integrated grounding for easy installation
- NEMA-6/IP-66/IP-67 enclosure rating
- Integrated monitoring and power line communication with RDG-256 gateway
- Can connect with BDM-300 and BDM-250



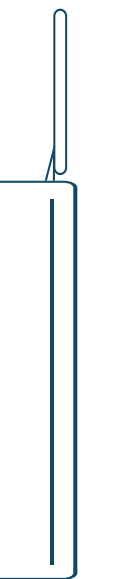
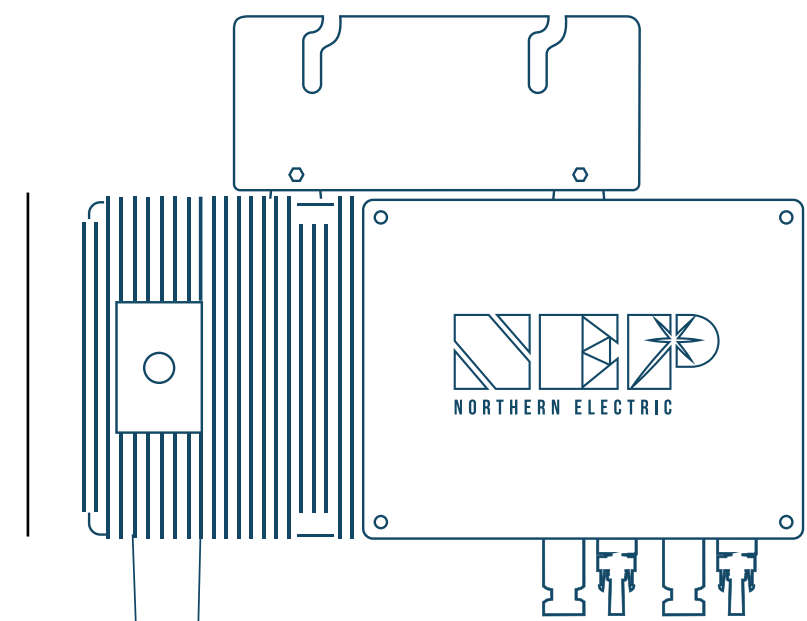
northernep.com



10.91"

1.97"

5.20"

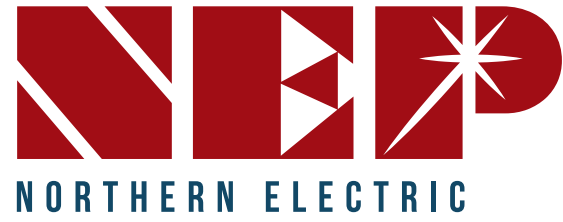


SAA  
152167



## 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-600X MICROINVERTER



\* 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)

| <b>INPUT(DC)</b>  |  |
|---|--|
| Recommended Max PV Power (Wp)   | 450 x 2  |
| Max DC Open Circuit Voltage (Vdc)   | 60   |
| Max DC Input Current (Adc)  | 14 x 2   |
| MPPT Tracking Accuracy  | >99.5%   |
| MPPT Tracking Range (Vdc)   | 22-55  |
| Isc PV (absolute maximum) (Adc)   | 18 x 2   |
| Maximum Inverter Backfeed Current to the Array (Adc)  | 0  |
| <b>OUTPUT (AC)</b>  |  |
| Peak AC Output Power (Wp)   | 580 (continuous)   |
| Rated AC Output Power (Wp)  | 500  |
| Nominal Power Grid Voltage (Vac)  | 240      208      230  |
| Allowable Power Grid Voltage (Vac)  | 211-264*      183-229*      configurable*  |
| Allowable Power Grid Frequency (Hz)   | 59.3 a 60.5*      configurable*  |
| THD   | <3% (at rated power)   |
| Power Factor (cos phi, fixed)   | >0.99 (at rated power)   |
| Rated Output Current (Aac)  | 2.28      2.78      2.52   |
| Current (inrush)(Peak and Duration)   | 24A, 15us  |
| Nominal Frequency (Hz)  | 60      50   |
| Maximum Output Fault Current (Aac)  | 4.4A peak  |
| Maximum Output Overcurrent Protection (Aac)   | 10   |
| Maximum Number of Units Per Branch (20A)<br>(All NEC adjustment factors have been considered) | 7      6      6  |
| <b>SYSTEM EFFICIENCY</b>  |  |
| Weighted Averaged Efficiency (CEC)  | 95.50%   |
| Night Time Tare 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)   | 10.91"x5.20"x1.97"(277x132x50 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<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      VDE-AR-N 4105*<br>VDE V 0126-1-1/A1<br>G83/2, CEI 021<br>AS 4777.2 & AS<br>4777.3, EN50438<br>ABNT NBR 16149/1615 |

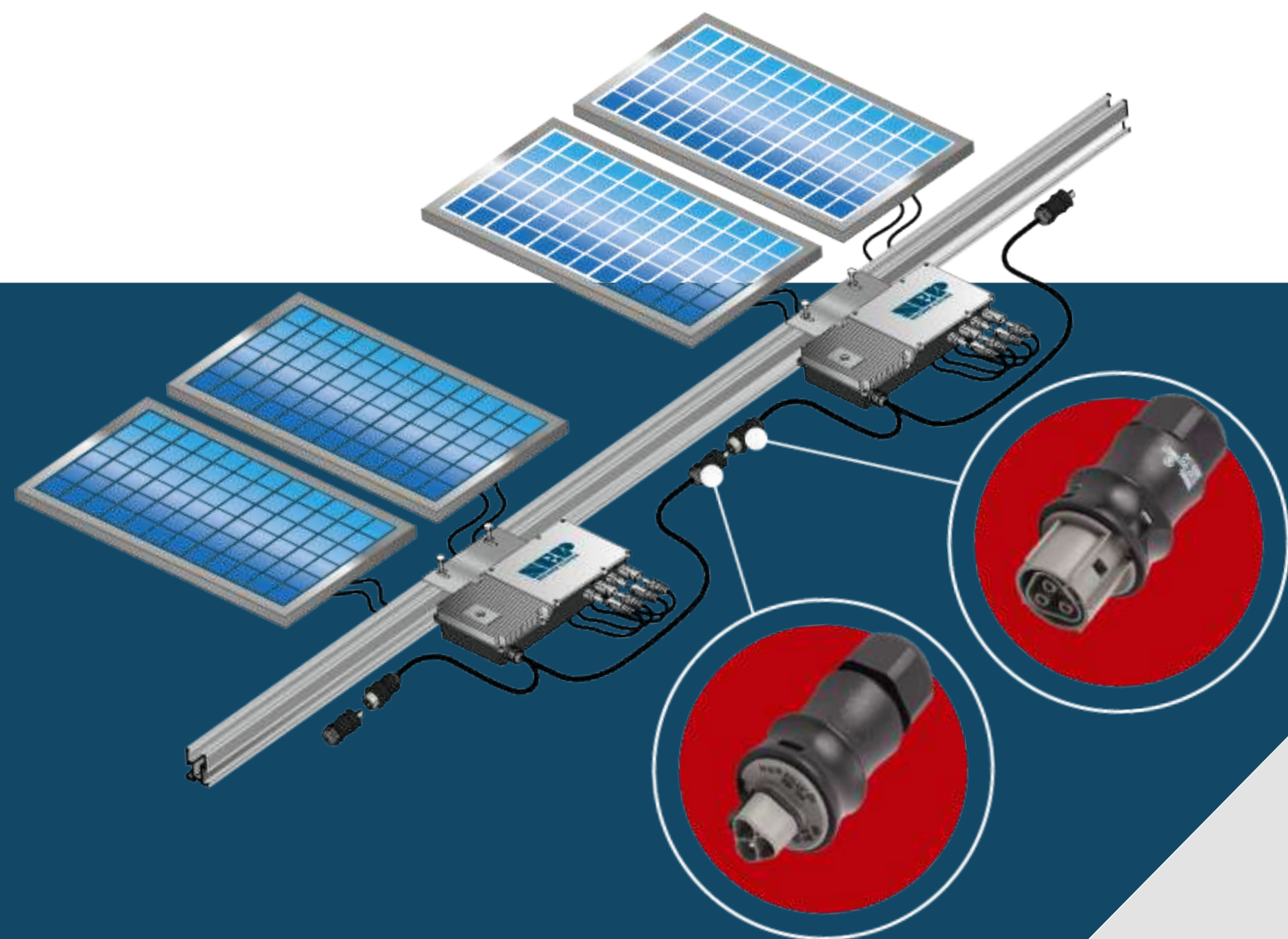


# BDM-600X MICROINVERTER

## Features



- Low cost \$/watt micro inverter
- High continuous output power up to 580Wac, recommended for dual max 450W solar panel
- High efficiency with 95.5% CEC
- Globally certified for UL1741, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEL 021, IEC61727, EN50438, ABNT NBR 6149/16150
- Integrated grounding for easy installation
- NEMA-6/IP-66/IP-67 enclosure rating
- Integrated monitoring and power line communication with RDG-256 gateway
- Can connect with BDM-300 and BDM-250



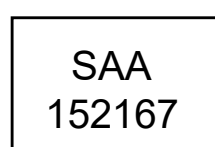
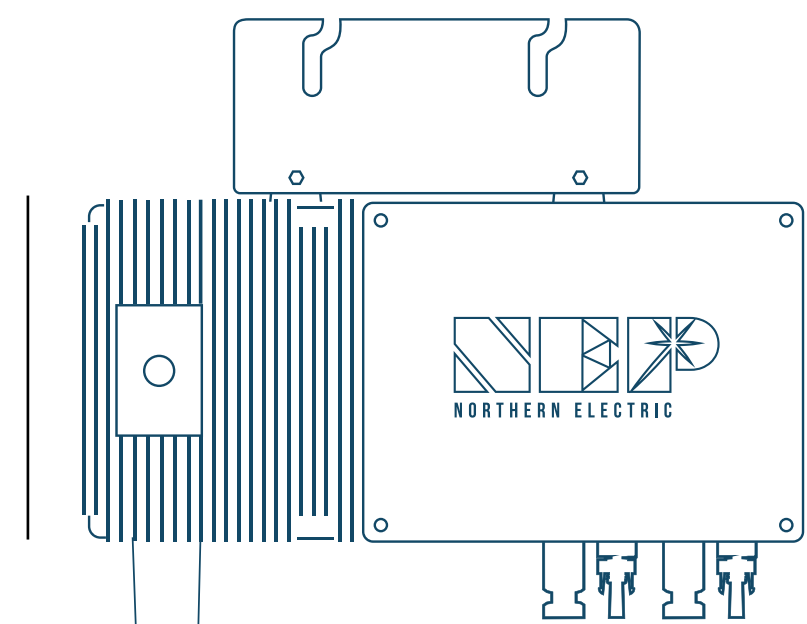
northernep.com



10.91"

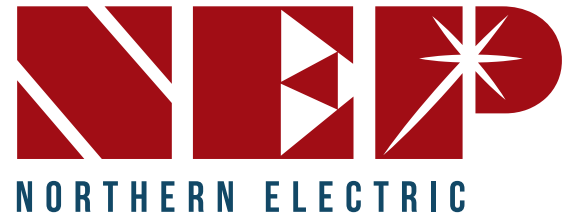
1.97"

5.20"



## 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-600X MICROINVERTER



\* 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)

| INPUT(DC)   | Recommended Max PV Power (Wp)      | 450 x 2   |               |  |
|---|------------------------------------|---|---------------|--|
| Max DC Open Circuit Voltage (Vdc)   | 60                                 |   |               |  |
| Max DC Input Current (Adc)  | 14 x 2                             |   |               |  |
| MPPT Tracking Accuracy  | >99.5%                             |   |               |  |
| MPPT Tracking Range (Vdc)   | 22-55                              |   |               |  |
| Isc PV (absolute maximum) (Adc)   | 18 x 2                             |   |               |  |
| Maximum Inverter Backfeed Current to the Array (Adc)  | 0                                  |   |               |  |
| OUTPUT (AC)   | Peak AC Output Power (Wp)          | 580 (continuous)  |               |  |
| Rated AC Output Power (Wp)  | 500                                |   |               |  |
| Nominal Power Grid Voltage (Vac)  | 240                                | 208   | 230           |  |
| Allowable Power Grid Voltage (Vac)  | 211-264*                           | 183-229*  | configurable* |  |
| Allowable Power Grid Frequency (Hz)   | 59.3 a 60.5*                       |   | configurable* |  |
| THD   | <3% (at rated power)               |   |               |  |
| Power Factor (cos phi, fixed)   | >0.99 (at rated power)             |   |               |  |
| Rated Output Current (Aac)  | 2.28                               | 2.78  | 2.52          |  |
| Current (inrush)(Peak and Duration)   | 24A, 15us                          |   |               |  |
| Nominal Frequency (Hz)  | 60                                 | 50  |               |  |
| Maximum Output Fault Current (Aac)  | 4.4A peak                          |   |               |  |
| Maximum Output Overcurrent Protection (Aac)   | 10                                 |   |               |  |
| Maximum Number of Units Per Branch (20A)<br>(All NEC adjustment factors have been considered) | 7                                  | 6   | 6             |  |
| SYSTEM EFFICIENCY   | Weighted Averaged Efficiency (CEC) | 95.50%  |               |  |
| Night Time Tare Loss (Wp)   | 0.11                               |   |               |  |
| PROTECTION FUNCTIONS  | 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)                  | 10.91"x5.20"x1.97"(277x132x50 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<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                          | VDE-AR-N 4105*<br>VDE V 0126-1-1/A1<br>G83/2, CEI 021<br>AS 4777.2 & AS<br>4777.3, EN50438<br>ABNT NBR 16149/1615 |               |  |