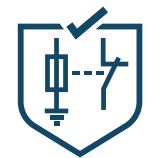# NEP
NORTHERN ELECTRIC

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

8.2"
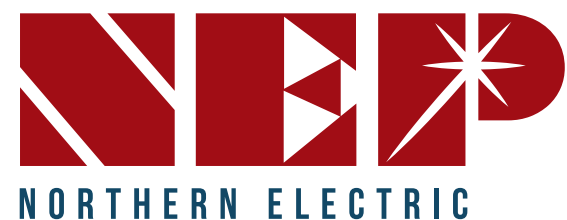
8.8"

1.38"

ETL Listed Intertek 4005622

CE

TUV SUD

SAA 152167
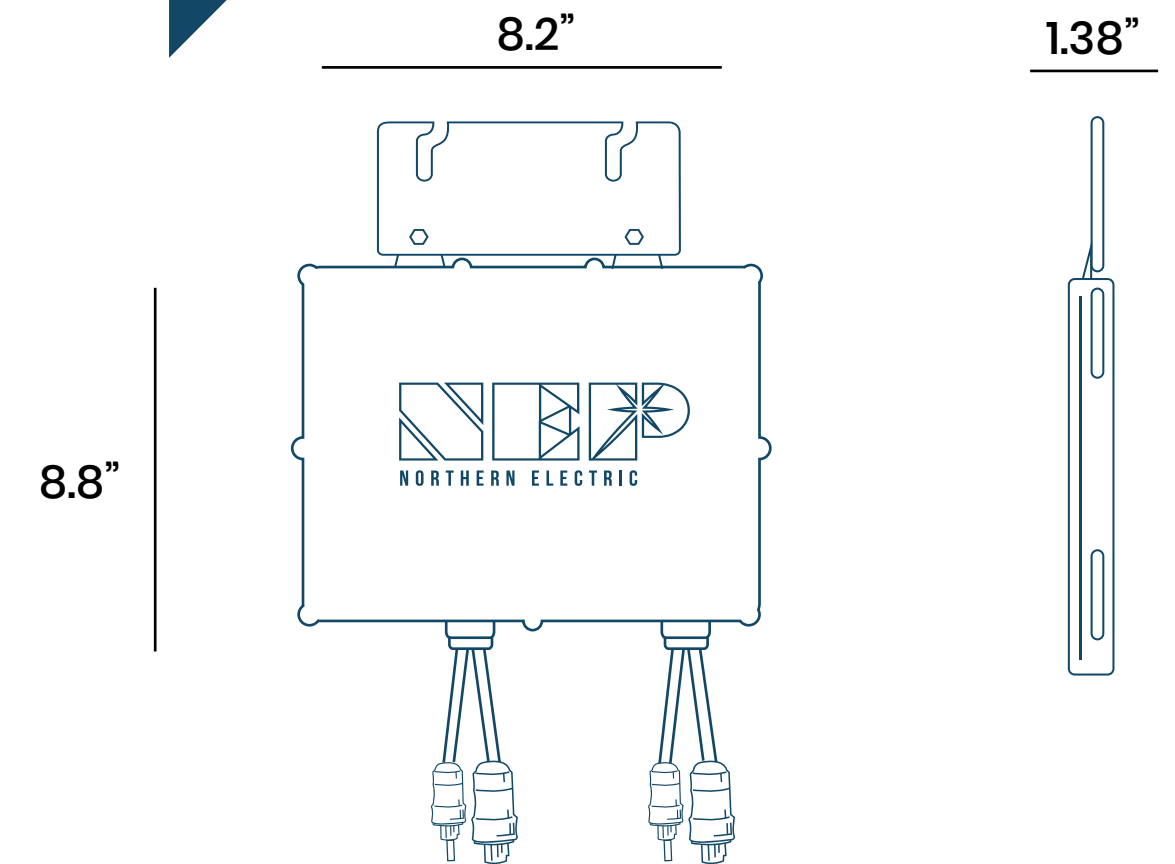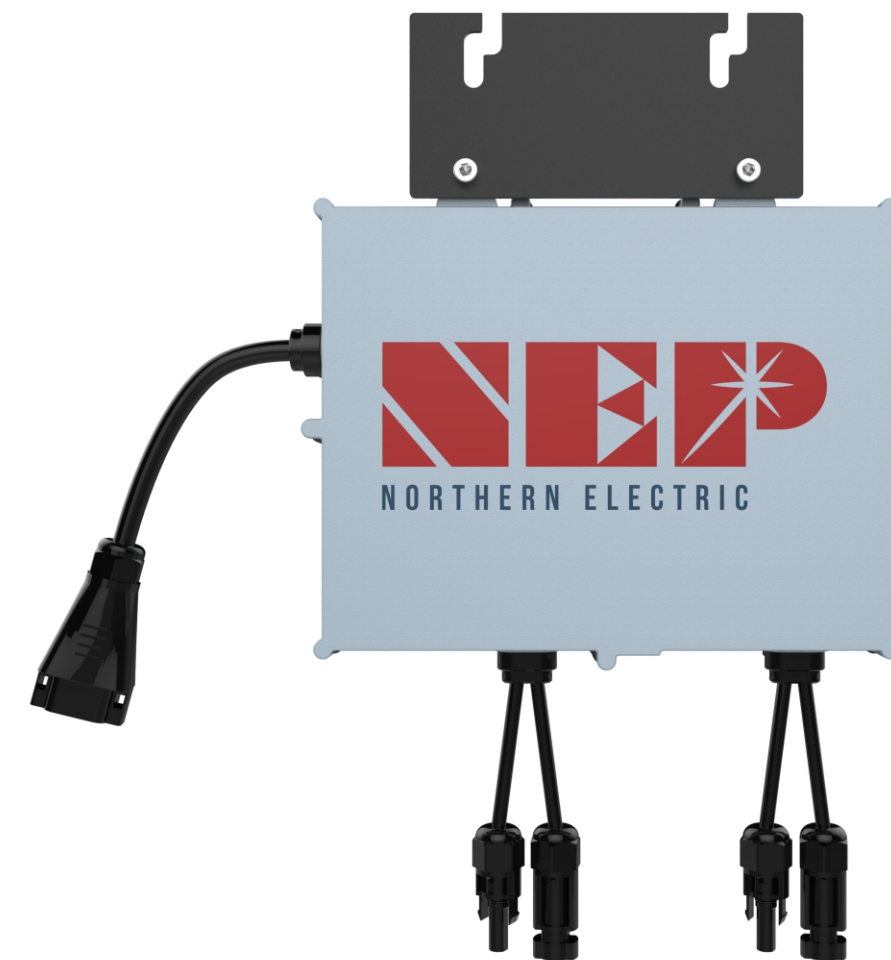
Important product information

- 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.

NEP
NORTHERN ELECTRIC

BDM-800 MICROINVERTER

INPUT(DC)			
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		

OUTPUT (AC)			
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

SYSTEM EFFICIENCY			
Weighted Averaged Efficiency (CEC)	96.50%		
Night Time Rate 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	–40ºF to +149ºF (–40ºC to +65ºC)		
Operating Temperature	–40ºF to +185ºF (–40ºC to +85ºC)		
Display	LED LIGHT		
Comunications	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 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 AS 4777.2 & AS TOR 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