

NORTHERN ELECTRIC

# BDM-800/650/550

## NEP Microinverters



### Features

#### Convenient

- Built-in PLC or WiFi
- Built-in Daisy Chain AC Cable
- Inter-connectable With Other NEP Microinverters

#### Safe and Reliable

- Integrated Grounding for Easy Installation
- NEMA-6/IP-66/IP-67 Enclosure Rating

#### Globally Certified

- CA Rule-21 Compliant
- UL 1741-SA/SB, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEL 021, IEC61727, EN504387, TOR Erzeuger Type A

#### Efficient

- High Efficiency 96.5% CEC
- Panel Level MPPT



More Effective

Max. Efficiency 96.5%



Global Certification

CA Rule-21, UL 1741-SA/SB, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2



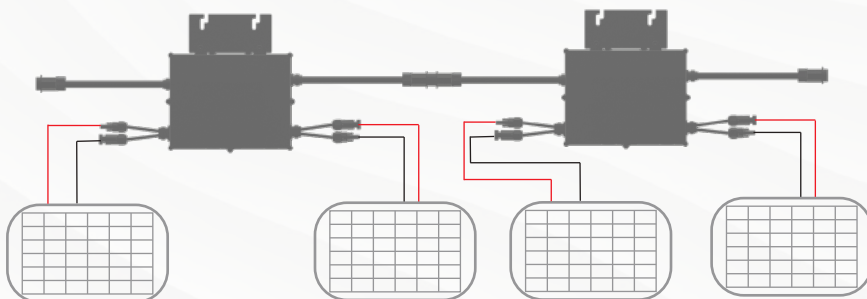
More Secure

Built-in Grounding  
Lightning Protection 6000V



More Reliability

IP67



# Model

# BDM-800/650/550

Input (DC)	BDM-550		BDM-650		BDM-800	
Recommended Max PV Power	450 W x 2		500 W x 2		650 W x 2	
Max DC Open Circuit Voltage	60 Vdc					
Max DC Input Current	15.2 A					
MPPT Tracking Accuracy	> 99.5%					
MPPT Tracking Range	22 - 55 Vdc					
ISC PV (Absolute Maximum)	20 x 2 A					
Maximum Inverter Backfeed Current to the Array	0 A					
Output (AC)	BDM-550		BDM-650		BDM-800	
Peak AC Output Power	550 W		650 W		800 W	
Rated AC Output Power	548 W		639 W		768 W	700 W
Nominal Power Grid Voltage	240 Vac	208 Vac	240 Vac	208 Vac	240 Vac	208 Vac
Allowable Power Grid Voltage	211 - 264 Vac	183 - 228 Vac	211 - 264 Vac	183 - 228 Vac	211 - 264 Vac	183 - 228 Vac
Rated Output Current	2.28 A	2.63 A	2.66 A	3.07 A	3.20 A	3.36 A
Maximum Number of Units Per Branch (20A)	7	6	6	5	5	4
(All NEC adjustment factors have been considered)						
Allowable Power Grid Frequency	59.3 - 60.5 Hz					
THD	> 3% (at rated power)					
Power Factor (cos phi, fixed)	-0.99 > 0.9 (adjustable) (0.9un ~ 0.9ov)					
Current (inrush) (Peak and Duration)	9.4 A, 15 US					
Nominal Frequency	60 Hz					
Maximum Output Fault Current	9.6 A Peak					
Maximum Output Overcurrent Protection	20 A					
System Efficiency	BDM-550		BDM-650		BDM-800	
Weighted Average Efficiency (CEC)	96.50%					
Night Time Tare Loss	0.11 W					
Protection Function	BDM-550		BDM-650		BDM-800	
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 x H x 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					
Over Voltage Category	II(PV), III (AC MAINS)					
Product Safety Compliance	UL 1741-SA, 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, G83/2, CEI 21, AS 4777.2, AS 4777.3, EN50438, ABNT NBR 16149/16150					