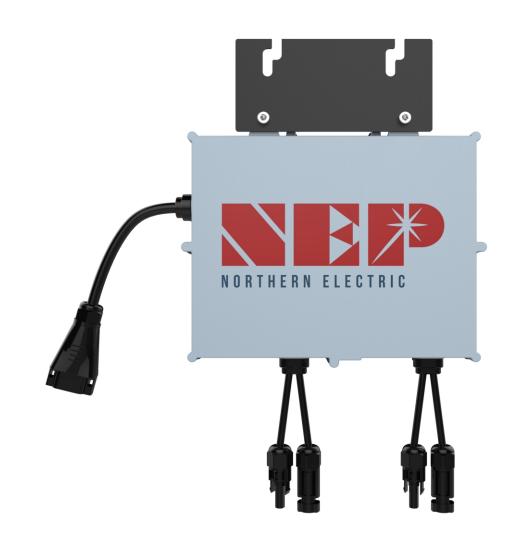


## BDM-550 **MICROINVERTER**



- •US.California Rule 21 Certified
- Low cost \$/watt micro inverter
- ·High continuous output power up to 548 Wac, recommended for dual max 450W solar panel
  - •High efficiency with 96.5% CEC
  - •Globally certified for UL1741, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEL 021, IEC61727, EN50438, TOR Erzeuger Typ A
  - Integrated grounding for easy installation
  - •NEMA-6/IP-66/IP-67 enclosure rating
  - •Integrated monitoring and power line communication with BDG-256 gateway
  - •Can connect with BDM-1600, BDM-1000, BDM-600 (aka BDM-300X2), BDM300 and BDM-250



















## Important product information

•NEP is committed to developing Clean, Affordable,

EfficReliable andient (CARE) products for our customers worldwide.

•NEP microinverters have an isolation transformer isolation between the DC input and the AC output network.





## BDM-550 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)
- \*Rule-21 Certified
- \*HECO Certified
- \*UL1741 SB

Recommended Max PV Power (Wp)					
Max DC Open Circuit Voltage (Vdc)   50		Recommended Max PV Power (Wp)		450*2	
Max DC Input Current (Adc)   15.2	INPUT(DC)				
INPUT(DC)		· · · · · · · · · · · · · · · · · · ·			
MPP1   Iracking Range (Vdc)   22"-bs     Isc PV (absolute maximum) (Adc)   20*2     Maximum Inverter Backfeed Current to the Array (Adc)   0     Peak AC Output Power (Wp)   548   548     Nominal Power Grid Voltage (Vac)   240   208     Allowable Power Grid Voltage (Vac)   21"-264*   183-226     Allowable Power Grid Frequency (Hz)   59.3-60.5*     THD   33% (dir treted power)     Power Factor (cos phi, fixed)   -0.99*0.9 (adjustable)     Power Factor (cos phi, fixed)   -0.99*0.9 (adjustable)     Power Factor (cos phi, fixed)   -0.99*0.9 (adjustable)     Rated Output Current (Aac)   2.28   2.63     Current (inrush)(Peak and Duration)   9.4A, Isus     Nominal Frequency (Hz)   60     Maximum Output Fault Current (Aac)   9.6A peak     Maximum Output Fault Current (Aac)   9.6A peak     Maximum Output Fault Current (Aac)   9.6A peak     Maximum Number of Units Per Branch (20A)   7   8     All NEC adjustment factors have been considered)   7   8     SYSTEM EFFICIENCY   Weighted Averaged Efficiency (CEC)   96.5 %     Night Time Tare Loss (Mp)   .11     Over/Under Voltage Protection   Yes     Over/Under Frequency Protection   Yes     Over/Under Frequency Protection   Yes     Over/Under Frequency Protection   Yes     Over/Under Frequency Protection   Yes     Over/Outper Protection   Yes     Overload Protection   Y					
Maximum Inverter Backfeed Current to the Array (Adc)   0		· ·		22-55	
Peak AC Output Power (Wp)   550		<u> </u>		20*2	
Rated AC Output Power (Wp)   548   548   Nominal Power Grid Voltage (Vac)   240   208   Allowable Power Grid Voltage (Vac)   211-264*   183-226   Allowable Power Grid Voltage (Vac)   211-264*   183-226   Allowable Power Grid Frequency (Hz)   59.3-60.5*		Maximum Inverter Backfeed Current to the Array (Adc)		0	
Rated AC Output Power (Wp)   548   548   Nominal Power Grid Voltage (Vac)   240   208   Allowable Power Grid Voltage (Vac)   211-264*   183-226   Allowable Power Grid Voltage (Vac)   211-264*   183-226   Allowable Power Grid Frequency (Hz)   59.3-60.5*   THD   >3% (at rated power)   9.3% (at rated power)   9.3% (at rated power)   9.4% (150   15	OUTPUT (AC)	Peak AC Output Power (Wp)		550	
Nominal Power Grid Voltage (Vac)   240   208     Allowable Power Grid Voltage (Vac)   21-264*   183-226     Allowable Power Grid Voltage (Vac)   59.3-60.5*     THD   33% (or trated power)     THD   33% (or trated power)     Power Factor (cos phi, fixed)   -0.99×0.9 (acjustable)     Rated Output Current (Aac)   2.28   2.63     Current (inrush)(Peak and Duration)   9.4A, Isus     Nominal Frequency (Hz)   60     Maximum Output Fault Current (Aac)   9.6A peak     Maximum Output Covercurrent Protection (Aac)   2.0     Maximum Number of Units Per Branch (20A)   7   6     Maximum Number of Units Per Branch (20A)   7   6     Weighted Averaged Efficiency (CEC)   96.5 %     Night Time Tare Loss (Wp)   11     Over/Under Frequency Protection   Yes     Over/Under Frequency Protection   Yes     Anti-Islanding Protection   Yes     Over/Under Protection   Yes     Reverse DC Polarity Protection   Yes     Overload Protection   Yes     Operating Temperature   -40°F to +185°F (-40°C to +85°F     Display   LED LIGHT     Commications   Power Line     Dimension (W-H-D)   8.8°x8.2°x1.38° (268x250x42 mm     Dimension (W-H-D)   8.8°x8.2°x1.38° (268x250x42 mm     Environment Category   Indoor and outdoor     Welght   Environment Category   Indoor and outdoor     Weltootton   Pollution Degree   PD 3			548		
Allowable Power Grid Voltage (Vac) Allowable Power Grid Frequency (Hz) 59.3-60.5* THD 70wer Factor (cos phi, fixed) Power Factor (cos phi, fixed) Power Factor (cos phi, fixed) Rated Output Current (Aac) Current (Inrush)(Peak and Duration) Nominal Frequency (Hz) Maximum Output Fault Current (Aac) Maximum Output Fault Current (Aac) Maximum Number of Units Per Branch (20A) (All NEC adjustment factors have been considered)  7 6  SYSTEM EFFICIENCY  SYSTEM EFFICIENCY  SYSTEM EFFICIENCY  SYSTEM EFFICIENCY  Protection Cycer (CEC) Night Time Tare Loss (Wp) Night Time Tare Loss (Wp) Night Frequency Protection Over/Under Frequency Protection Anti-Islanding Protection Yos Over/Under Frequency Protection Reverse DC Polarity Protection Yes Overload Protection Protection Degree NEMA-6 / IP-66 / IP-67 Ambient Temperature Operating Temperature -40°F to +186°F (-40°C to +85°C Operating Temperature Display Comunications Power Line PROTECTION FUNCTIONS  FUNCTIONS  Protection Power Line Pollution Degree PD 3		Nominal Power Grid Voltage (Vac)			
Allowable Power Grid Frequency (Hz) 59.3-60.5* THD					*
THD					,
Power Factor (cos phi, fixed)					
Rated Output Current (Aac)   2.28   2.63				· · · · · · · · · · · · · · · · · · ·	
Current (inrush)(Peak and Duration)   9.4A, 15us					
Nominal Frequency (Hz)   80					
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)   7   6				·	
CAll NEC adjustment factors have been considered)   7   6				20	
Night Time Tare Loss (Wp)   II			7	6	
Night Time Tare Loss (Wp)      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     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	SYSTEM EFFICIENCY	Weighted Averaged Efficiency (CEC)		96.5 %	
Over/Under Frequency Protection   Yes		Night Time Tare Loss (Wp)		.11	
Anti-Islanding Protection   Yes		Over/Under Voltage Protection		Yes	
Over Current Protection   Yes		Over/Under Frequency Protection		Yes	
Reverse DC Polarity Protection   Yes		Anti-Islanding Protection		Yes	
Overload Protection   Yes		Over Current Protection		Yes	
Protection Degree		Reverse DC Polarity Protection		Yes	
Ambient Temperature		Overload Protection		Yes	
Ambient Temperature		Protection Degree	NF	NEMA-6 / IP-66 / IP-67	
Operating Temperature		Ambient Temperature		•	
Display   LED LIGHT		·			
PROTECTION           FUNCTIONS         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			70110	•	
PROTECTION           FUNCTIONS         Dimension (W-H-D)         8.8"x8.2"x1.38" (268x250x42 mn           Weight         6.4 lbs. (2.9 kg)           Environment Category         Indoor and outdoor           Wet Location         Suitable           Pollution Degree         PD 3					
FUNCTIONS    Weight		Dimension (W-H-D)	8 8"x8 2"x		
Environment Category  Wet Location  Pollution Degree  Pollution Degree  FUNCTIONS  Environment Category  Indoor and outdoor  Suitable  PD 3			OIO AGIL A		
Wet Location  Pollution Degree  PD 3			l <sub>P</sub>		
Pollution Degree PD 3					
			11(1		
Product Safety Compliance  UL 1741 CSA C22.2 No. 107.1  IEC/EN 62109-1 IEC/EN 62109-2			UL 1741 CSA C22.2	IEC/EN 62109-1	
detailed grid code compliance)  IEEE 1547  G83/2, CEI 021  AS 4777.2 & AS  4777.3,EN50438		· · · · · · · · · · · · · · · · · · ·	IEEE 1547	VDE V 0126-1-1/A1 G83/2, CEI 021 AS 4777.2 & AS	