NORTHERN ELECTRIC

BDM 300 MICROINVERTER

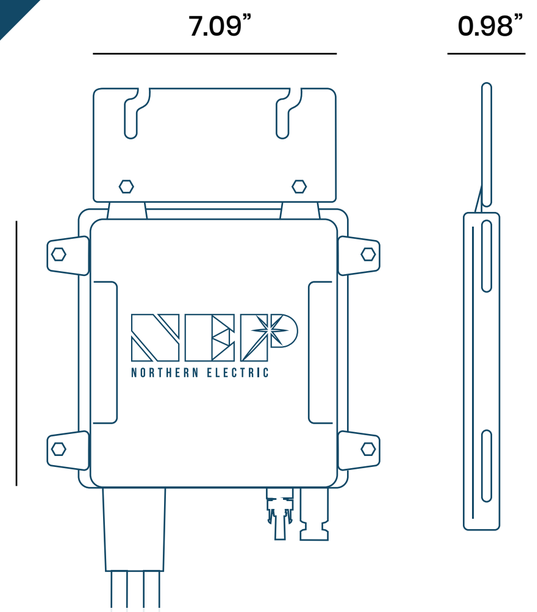
northernep.com

Features

- Qualified equipment that meets Hawaiian Electric TrOV-2 and full frequency and voltage ride-through
- Cable options including conventional trunk cable and daisy chain
- Thinnest micro inverter in world, 25mm in thickness

Designed for frame mount (AC module), as well as rail mount solutions 38 W solar panels

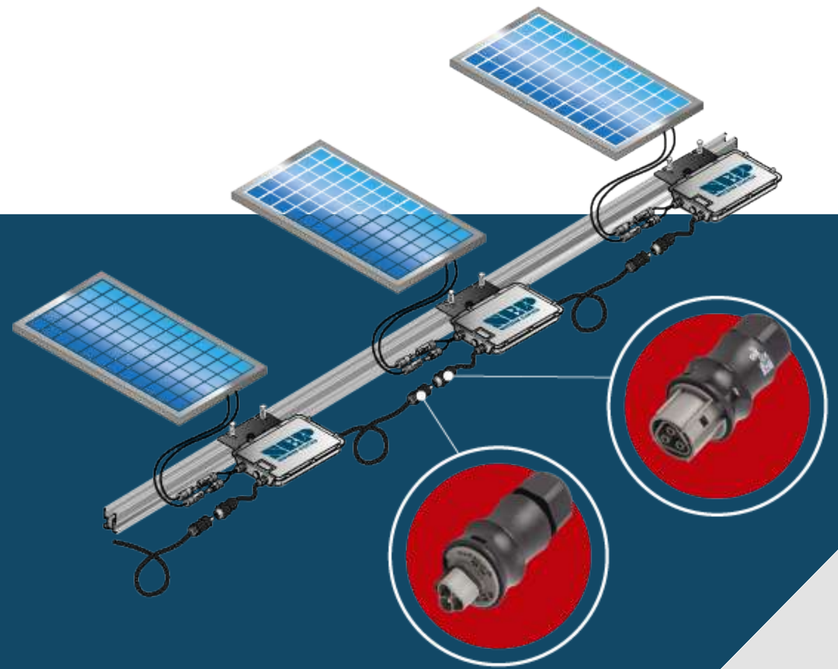
- High efficiency with 95.5% CEC
- Globally certified for c-ETL-us, SAA, TUV, VDE-ARN-N 4105, VDE 0126 G83/2, CEL 021, IEC61727, EN50438
- Integrated grounding for easy installation
- NEMA-6/IP-66/IP-67 enclosure rating
- Integrated monitoring and power line communication with BDG-256 gateway
- Fully comply with NEC 2014/2017 section 690.12 Rapid Shutdown requirement. No aditonial equipment is required



Intertek 4005622

MIC/KS 総務省指定 第甲-15001号

SAA 141618



Important product information

- NEP is committed to developing Clean, Reliable, Convenient and Efficient (CARE) products for our customers worldwide. Our products have a 10-year warranty.
- NEP microinverters have an isolation transformer and basic isolation between the DC input and the AC output network.

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INPUT(DC)	Recommended Max PV Power (Wp)	450		
	Max DC Open Circuit Voltage (Vdc)	60		
	Max DC Input Current (Adc)	14		
	MPPT Tracking Accuracy	>99.5%		
	MPPT Tracking Range (Vdc)	22-55		
	Isc PV (absolute maximum) (Adc)	18		
	Maximum Inverter Backfeed Current to the Array (Adc)	0		
OUTPUT (AC)	Peak AC Output Power (Wp)	300		
	Rated AC Output Power (Wp)	250		
	Nominal Power Grid Voltage (Vac)	240	208	230
	Allowable Power Grid Voltage (Vac)	211V-264*	183V-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)	1.04	1.2	1.09
	Current (inrush)(Peak and Duration)	12A, 15us		
	Nominal Frequency (Hz)	60		50
	Maximum Output Fault Current (Aac)	2.2A peak		
	Maximum Output Overcurrent Protection (Aac)	6.3		
	Maximum Number of Units Per Branch (20A) (All NEC adjustment factors have been considered)	15	13	14
SYSTEM EFFICIENCY	Weighted Averaged Efficiency (CEC)	95.50%		
	Night Time Tare Loss (Wp)	0.08	0.06	0.07
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		
	Comunications	Power Line		
	Dimension (W-H-D)	7.09" x7.32" x 0.98" (180x186x25 mm)		
	Weight	3.3 lbs. (1.5 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 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 021 AS 4777.2 & AS 4777.3,EN50438	

* 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 2014 Section 690.11 DC Arc-Fault Circuit Protection
*NEC 2014 Section 690.12 Rapid Shutdown of PV Systems on Buildings
*NEC 2014 Section 705.12 Point of Connection (AC Arc-Fault Protection)