

## BDM-300 Grid-tie Micro Inverter System

















## **Features**

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- U.S. California Rule 21 Certified
- 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
- High continuous output power up to 300Wac, recommended for max 380W solar panels
- High efficiency with 95.5% CEC
- Globally certified for c-ETL-us, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEI 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 additional equipment is required



## **BDM-300**Grid-tie Micro Inverter System

NORTHER	N ELECTRIC			Зузсен	
	MODEL	BDM-300			
INPUT(DC)	Recommended Max PV Power (Wp)	380			
	Max DC Open Circuit Voltage (Vdc)	60			
	Max DC Input Current (Adc)	12			
	MPPT Tracking Accuracy	>99.5%			
	MPPT Tracking Range (Vdc)	22-55			
	Isc PV (absolute maximum) (Adc)	14			
	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)	211-264*	183-229*	configurable*	
	Allowable Power Grid Frequency (Hz)	59.3-	59.3-60.5* configurable*		
	THD	<3% (at rated power)			
	Power Factor (cos phi, fixed)	>0.99 (at rated power)			
	Rated Output Current (Aac)	1.04	1.20	1.09	
	Current (inrush) (Peak and Duration)	12A, 15us			
	Nominal Frequency (Hz)	6	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)		95.5%	L	
	Night Time Tare Loss (Wp)	0.08	0.06	0.07	
PROTECTION FUNCTIONS	Over/Under Voltage Protection		Yes	<u> </u>	
	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)	7.09'	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	California Rul UL 1741 CSA C		IEC/EN 62109-1 IEC/EN 62109-2	
	Grid Code Compliance* (Refer to the label for the detailed grid code compliance)	IEEE		VDE-AR-N 4105 VDE V 0126-1-1/A G83/2, CEI 021 AS 4777.2 & AS	
	Grid parameters are configurable through a BDG-     All NEC required adjustment factors have been co     for Rated Output AC Current  Compliance     NEC 2014 Section 690.11 DC Arc-Fault Circuit Prot     NEC 2014 Section 690.12 Rapid Shutdown of PV S     NEC 2014 Section 705.12 Point of Connection (AC)	nsidered for AC outputs. A ection ystems on Buildings		4777.3,EN50438	

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