PRODUCT DATASHEET





BDM-300 MICROINVERTER

BDM-300 CEC Listing as Utility Interactive Inverter

(NC0144-US-BQ, NC0144-L-US-BQ)



STANDARD DIMENSIONS

Inches





Certifications

UL 1741, CSA C22.2, NO. 107.1, IEC/EN 62109-1, IEC/EN 62109-2, 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





Per box: 7 pcs Boxes per layer: 9 Layers: 3

Pallet Qty: 189 pcs Pallet weight: 668 lbs.

SPECIFICATIONS

Input (DC)		
Recommended Max PV Power:	400 W	
Max DC Open Circuit Voltage:	60 Vdc	
Max DC Input Current:	14 A	
MPPT Tracking Accuracy:	> 99.5%	
MPPT Tracking Range:	22 – 55 Vdc	
ISC PV (Absolute Maximum):	18 A	
Maximum Backfeed Current to Array: 0 A		

Output (AC)

output (AC)		
Peak AC Output Power:	300 W	
Max Continuous Output Power:	250 W	
Nominal Power Grid Voltage:	240 Vac	3φ: 208 Vac
Allowable Power Grid Voltage:	211-264 Vac	3ф: 183-228 Vac
Rated Output Current:	1.04 A	3φ: 1.20 A
Maximum Units Per Branch (20A):	15 units	3φ: 13 units
(All NEC adjustment factors considered)		
Allowable Power Grid Frequency:	59.3 - 60.5 Hz	
Allowable Power Grid Frequency: THD:	59.3 - 60.5 Hz < 3% (at rated power)	
Allowable Power Grid Frequency: THD: Power Factor (cos phi, fixed):	59.3 - 60.5 Hz < 3% (at rated power) -0.99 > 0.9 (adjustable)
Allowable Power Grid Frequency: THD: Power Factor (cos phi, fixed): Current (inrush) (Peak and Duration):	59.3 - 60.5 Hz < 3% (at rated power) -0.99 > 0.9 (adjustable 24 A, 15 US)
Allowable Power Grid Frequency: THD: Power Factor (cos phi, fixed): Current (inrush) (Peak and Duration): Nominal Frequency:	59.3 - 60.5 Hz < 3% (at rated power) -0.99 > 0.9 (adjustable 24 A, 15 US 60 Hz)
Allowable Power Grid Frequency: THD: Power Factor (cos phi, fixed): Current (inrush) (Peak and Duration): Nominal Frequency: Max Output Fault Current:	59.3 - 60.5 Hz < 3% (at rated power) -0.99 > 0.9 (adjustable 24 A, 15 US 60 Hz 2.4 Arms for 3 cycles)
Allowable Power Grid Frequency: THD: Power Factor (cos phi, fixed): Current (inrush) (Peak and Duration): Nominal Frequency: Max Output Fault Current: Max Output Overcurrent Protection:	59.3 - 60.5 Hz < 3% (at rated power) -0.99 > 0.9 (adjustable 24 A, 15 US 60 Hz 2.4 Arms for 3 cycles 10 A)

System Efficiency

Weighted Average Efficiency (CEC):	95.5%
Nighttime Tare Loss:	0.11 W

Protection Function	
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:	Powerline Communications
Environment Category:	Indoor and outdoor
Wet Location:	Suitable
Pollution Degree:	PD 3
Over Voltage Category:	II(PV), III (AC MAINS)

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)

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