

# BDM-500 MACROINVERTER

## Features



• High continuous output power up to 500Wac, recommended for max 750W solar panel



• High efficiency with 95.5% CEC



• Globally certified, UL1741, SAA, TUV, VDE-AR-N 4105, VDE 0126, G83/2, CEI 021, IEC61727, EN50438, ABNT NBR 16149/16150



• Integrated grounding and AC cable for easy installation



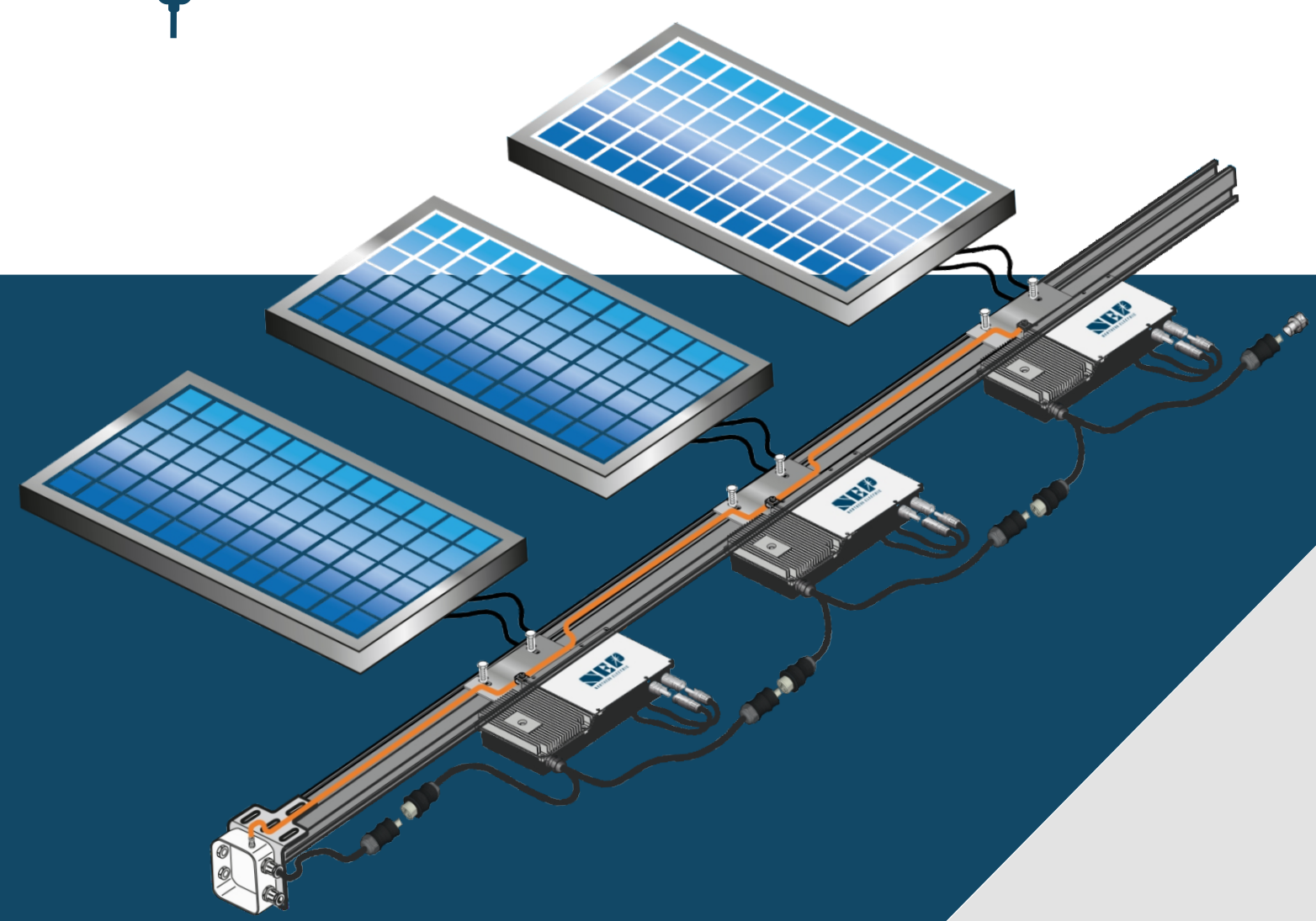
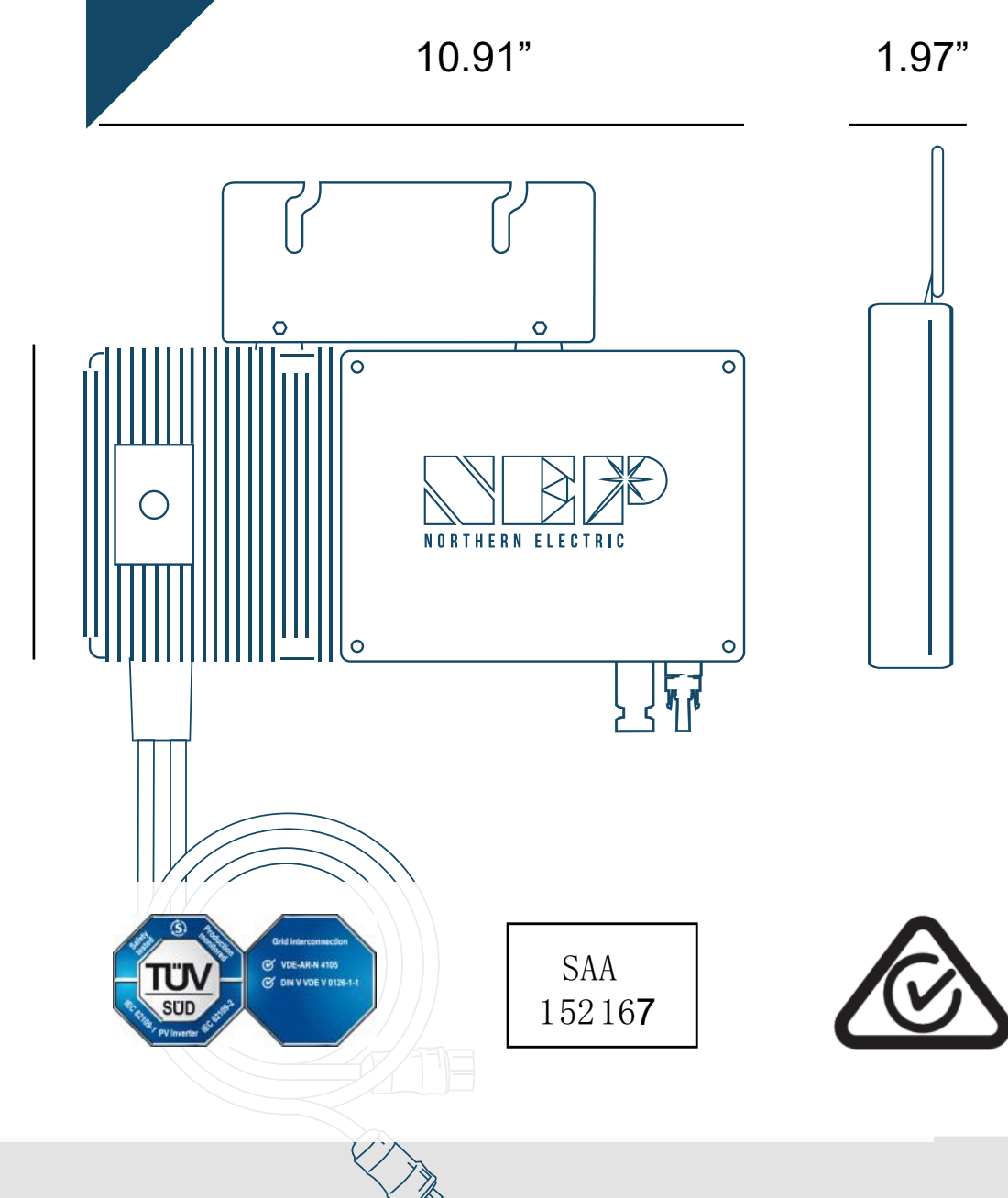
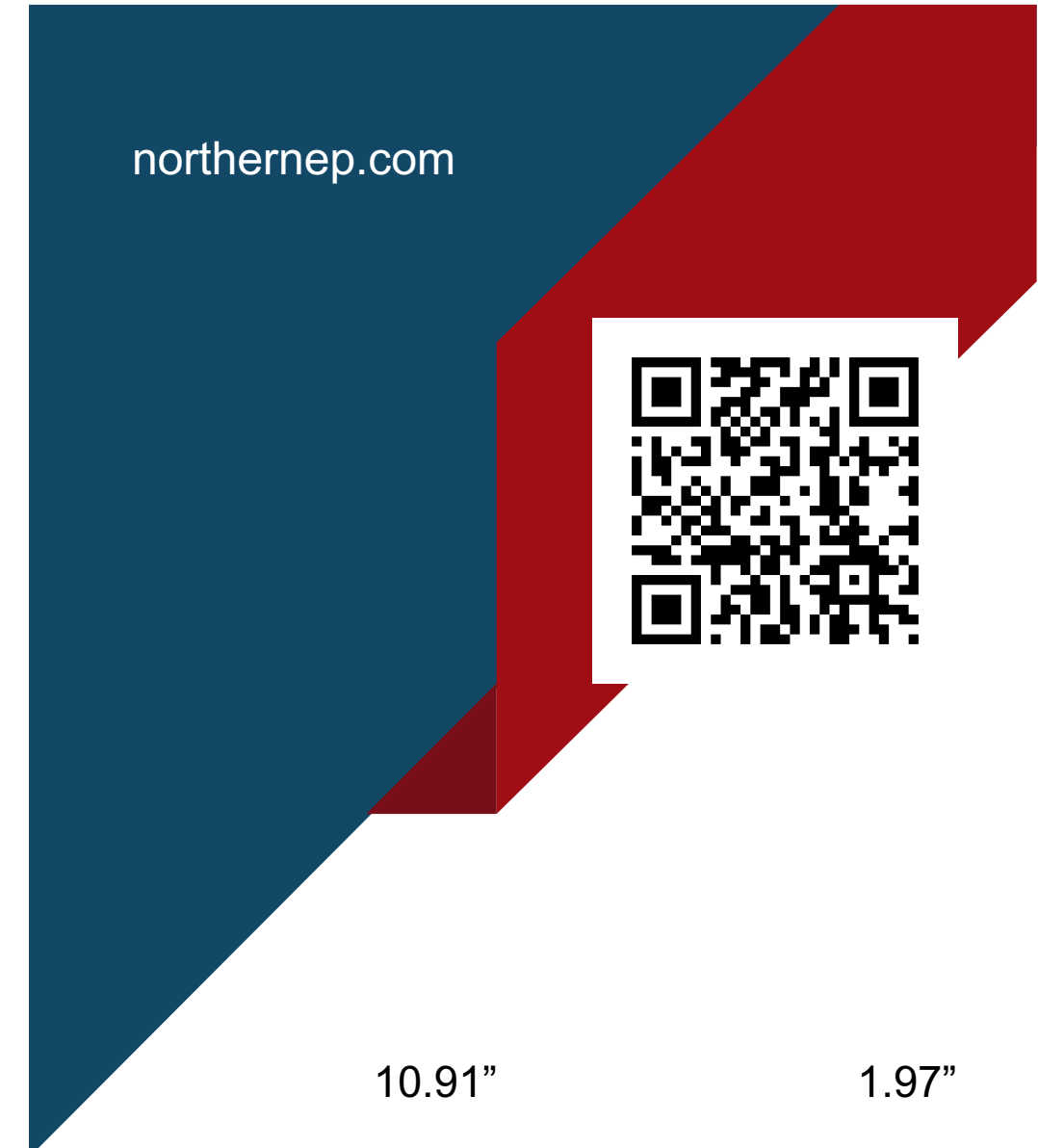
• NEMA-6/IP-66/IP-67 enclosure rating



• MC4 and TS4 DC input connector options

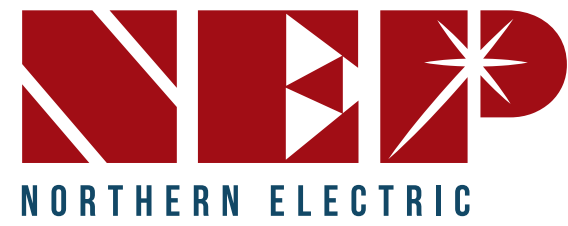


• Can connect with BDM-300, BDM-250 and BDM-300X2



## 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.



# BDM-500 MACROINVERTER



## INPUT(DC)

## OUTPUT (AC)

## SYSTEM EFFICIENCY

## PROTECTION FUNCTIONS

Max Recommended PV Power (Wp)	750		
Max DC Open Circuit Voltage (Vdc)	60		
Max DC Input Current (Adc)	15.5		
MPPT Tracking Accuracy	>99.5%		
MPPT Tracking Range (Vdc)	35 - 55		
Isc PV (absolute maximum) (Adc)	14		
Maximum Inverter Backfeed Current to the Array (Adc)	0		
Rated AC Output Power (Wp)	500		
Nominal Power Grid Voltage (Vac)	240	208	230
Allowable Power Grid Voltage (Vac)	211-264*	183-229*	180-270*
Allowable Power Grid Frequency (Hz)	59.3 a 60.5*		
THD	<3% (at rated power)		
Power Factor (cos phi, fixed)	>0.99 (at rated power)		
Rated Output Current (Aac)	2.08	2.40	2.17
Current (inrush)(Peak and Duration)	24A, 15us		
Nominal Frequency (Hz)	60	50	
Maximum Output Fault Current (Aac)	4.4A peak		
Maximum Output Overcurrent Protection (Aac)	10		
Maximum Number of Units Per Branch (20A) (All NEC adjustment factors have been considered)	7	6	6
Weighted Averaged Efficiency (CEC)	95.50%		
Night Time Tare Loss (Wp)	0.11		
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-H-D)	10.91"x5.20"x1.97"(277x132x50 mm)		
Weight (including AC cable)	8.8 lbs. (4.0 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
Grid Code Compliance* (Refer to the label for the detailed grid code compliance)	IEEE 1547		

\* 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

NEC 2014/2017/2020 COMPLIANCE  
 \*Section 690.11 DC Arc-Fault Circuit Protection  
 \*Section 690.12 Rapid Shutdown of PV Systems on Buildings  
 \*Section 705.12 Point of Connection (AC Arc-Fault Protection)