



NORTHERN ELECTRIC



# NEPTUNE - RSD-ready, Commercial 3-Phase Inverters

## NEP-75~100kW

### 480Vac

Max efficiency 98.8% CEC efficiency 98.3%

150% DC/AC Ratio

Integrated "NEP Rapid Shutdown Transmitter"

Compatible with NEP 'Galaxy' Data/Comms Solutions

Intelligent String Monitoring

Smart I-V Curve Trace Scan

NEP 'Galaxy' enabled panel level data granularity

AFCI Protection

Type 4X, C5 Anti-Corrosion Level

DC side supports "Y" connector

Support aluminum wire to reduce cost

Built-in PID recovery for better module performance

# Model

# NEP-75~100KW

Input   DC	75K	100K
Max Input Voltage - V		1000
Rated voltage - V		600
Start-up Voltage - V		195
Mppt Voltage Range - V		180-1000
Max. Input Current - A	8*26	10*26
Max. Short Current - A	8*40	10*40
No. of MPPTs / Inputs per MPPT	8/16	10/20
Output   AC		
Rated Output Power - kW	75	100
Max. Apparent Output Power - kBA	75	100
Max. Output Power - kW	75	100
Rated Grid Voltage - V		480
Rated Grid Type		3Φ PE
Rated Grid Frequency - Hz		60
Max. Output Current - A	90.2	120.3
Power Factor (Nominal,Adjustable Range)		>.99 (.8 leading - .8 lagging)
THDi		<3%
Efficiency		
Max. Efficiency - %		98.8
CEC Efficiency - %		98.3
Protection		
DC Reverse Polarity Protection		Yes
Surge Protection		DC:II, AC:II
Short-Circuit Protection	Grid Monitoring	Yes
Anti-islanding Protection	Temperature Protection	Yes
Strings Monitoring		Yes
I-V Curve Scanning		Yes
Integrated Pid Recovery		Yes
Integrated AFCI (DC arc-fault circuit protection)		Yes
Integrated DC Switch		Yes
Integrated AC Switch		Yes
General Data		
Dimensions (W*H*D) - in - mm	41.9*22.3*13.6 / 1065*567*344.5	
Weight - lbs - kg	187 / 85	
Topology	Transformerless	
Night Power Consumption - W	<2	
Relative Humidity	0-100%	
Operating Ambient Temperature Range - °F - °C	-22-140 / -30-60	
Storage Environment - °F - °C	-13~176 / -25~80	
Ingress Protection	Type 4X	
Cooling Concept	Intellegent Redundant Cooling Fan	
Max. Operation Altitude - ft - m	13,120 / 4000	
Certifications	UL1741SB,UL1741SA,IEEE 1547-2018, UL1699B,UL1998,FCC Part15 ClassB,California Rule 21, HECO Rule 14H,NEC 690.12-2020,CAN- CSA C22.2107.1-1	
Features		
DC Connection	Staubli MC4 Connector	
AC Connection	OT Terminal (4AWG to 3- 0 AWG)	
Display	LCD	
Communication	Modbus RTU (Sunspec Compliant), RS485, Ethernet, Opetional: Cellular, Wi-Fi	