

NEOVOLTA™



Hybrid Inverter

NV16kW

Designed and Engineered in
California since 2018

Plug & Play

120/240Vac Split Phase

120/208Vac 3 Phase

200A pass through

Generator Ready

AC-Solar Ready

Smart Load Ready



800.364.5464

NEOVOLTA.COM

PV String Input Data	
Max. PV Input Power* (W)	24,000*
Max. PV Input Voltage (Voc)	500
Startup Voltage (Vmp)	120
MPPT Voltage Range (Voc)	120-500
MPPT Voltage Range at Full Load (Vmp)	150-430
Max. Input Current MPPT (A) @ MPPT	20/20/20/20 (self-limiting/clipping)
Max. Input Short-Circuit Current (A) MPPT No of MPPT Strings per MPPT	25A/25A/25A/25A 4 2+2
*Max. PV Input Power is limited to 500Voc and 20A per MPPT. 500Voc for DC string sizing MUST include adj. for cold temperature.	

AC Input/Output Data	
Rated AC Output (W)	16,000W
Max. Input AC-Solar/Gen.	16,000W
Rated AC Output Grid (A)	66.7/73.3 max
Max. AC Output BAT. (W)	13,000 / 16,000 w. DC-PV
Max. Continuous AC Passthrough (grid to load) (A)	200
Peak Power Off-Grid & Surge Capacity (VA)	13,200 / 110%, 30s / 120%, 10s / 180%, 0.1s
Power Factor Adjustment Range	0.8leading – 0.8lagging
Rated Input/Output Voltage Voltage Range (V)	120/240; 208 0.88Un<U<1.1Un
Rated Input/Output Frequency Frequency Range (Hz)	60 55-65
Grid Connection	2L + N + PE
Total Current Harmonic Distorion (THDi)	<3% (of nominal power)
DC Injection Current	<0.5 in
Max. Parallel for on-grid and off-grid	3(pcs) 120/240Vac 3(pcs) 120/208Vac

Battery Input Data (DC)	
Battery Type (Compatible)	Lithium Iron Phosphate (LiFePO4)
Battery Voltage Range (V)	40-58
Max. Charging Current (A)	260/280
Max. Discharging Current (A)	260/280
Charging Strategy for Li-ion Battery	Self-Adoption BMS
Number of Battery Input	1 (2 wires; positive and negative)

Equipment	
Integrated	Protection: DC Polarity Reverse Connection, AC Output Overcurrent, Thermal, AC Output Overvoltage, AC Output Short Circuit, Overvoltage Load Drop, Surge Monitoring: DC Component, Ground Fault Current, Power Network, Island Protection, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance, Residual Current (RCD) Detection, Arc Fault Circuit Interrupter (optional)
Surge Protection	Type (DC), TYPE (AC)
Communication Interface	RS485 RS232 CAN
Monitor Mode	Wi-Fi 4G (optional) RS485

General Data	
Operating Temperature	-13F - 140F
Humidity Limit (%)	up to 95
Max. Elevation	4,000m/13,123ft (10% derating at 2,000m/6,561ft)
Noise (dB)	<38
IP Rating	IP65/NEMA 3R
Typology	Non-Isolated
Overvoltage Category	OVC (DC), OVC (AC)
Dimensions (W x H x D) Weight (lbs)	19.5" x 35.4" x 10.2" 123
Cooling	Intelligent Air Cooling
Max. Efficiency (%)	96.5
MPPT Efficiency (%)	>99.0
Warranty	15 years
Grid Regulation Certifications	IEEE1547.1 SRD V2.0 UL1741 CRD UL1741SA & SB UL1699B
Load Start Capability (LRA)	92.66A

