

NEOVOLTA™



Hybrid Inverter

NV16KAC

Designed and Engineered
in California since 2018

24kW DC PV Input

On Grid and Off Grid

**16kW of AC Output
in Backup Mode**

**Ease of Installation:
200A Passthrough Design**

**100% Unbalanced Loads
Capability**

3rd Multi-Purpose AC Terminal



800.364.5464
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PV Input Data

Max. PV Input Power (W)	24,000
Max. PV Input Voltage (Voc)*	500*
Startup Voltage (Vmp)	120
MPPT Voltage Range (V)	120-430
Max. Input Current (A) @ MPPT	20/20/20/20
Max. Input Short-Circuit Current (A) @ MPPT*	25A/25A/25A/25A*
MPPT Strings per MPPT*	4 1+1+1+1 (2 2+2)*

Battery Input Data (DC)

Battery Type (Compatible)	Lithium Iron Phosphate (LiFePO4)
Battery Voltage Range (V)	40-58
Nominal Voltage (V)	48
Max. Charging / Discharging Current (A)*	260/280*
Charging Strategy for Li-ion Battery	BMS Autodetect
Number of Battery Inputs	2 x positive, 2 x negative

AC Output (on-grid)

Nominal AC voltage (L-N/L1-L2)	(110-120)/(220-240V) Split Phase, 240V single phase
Nominal AC Output (W)	16,000
Max. Apparent power output to grid (VA)	17,600
Nominal AC Output (A)	66.7
Max. Continuous AC Passthrough (A)	200
Max. AC Output Current (A)	73.3
Total Current Harmonic Distortion (THDi)	<3% (of nominal power)
Grid Connection	2L + N + PE

AC Output (back-up)

Max. apparent output power with battery only	13.2kVA - 100%
Max output power with PV (W)	16,000
Output THDU	<2%
Surge Capacity	LRA:167A (20kW@10s / 14.3kW@30s / 13.6W@60s)
Power Factor Settings Range	0.8 leading - 0.8 lagging
Nominal Output Voltage Voltage Range (V)	120/240; 120/208@3-Phase
Nominal Output Frequency Frequency Range (Hz)	60 55-65

Environment

Operating Temperature F/C	-13°F - 140°F / -25°C - 60°C
Humidity Limit (%)	<=95%
Max. Elevation	4,000m/13,123ft (10% derating at 2,000m/6,561ft)
Noise (dB)	57dB
IP Rating / Nema	IP65/NEMA 3R
Cooling Method	Fan Cooling

Communication

BMS Communication	CAN
Communication	RS485 WiFi 4G (optional)

General

GEN/ Multifunction Port	Available for Generators @120/240V <= 90A, AC Coupled Solar 16kW, and Load Shed 120/240V <= 90A
Integrated Protection	GFC detection, Arc fault protection, PV reverse polarity protection, Island protection, Insulation PV test, Leakage current protection, AC output short circuit and over current protection, AC output over/under-voltage protection
Surge Protection	Type II (DC), TYPE II (AC)
Max. Efficiency (%)	96.5%
MPPT Efficiency (%)	>99.0%
Warranty	15 Years
Dimensions (W x H x D) in/mm	19.5"x 35.4"x 10.2" / (495mm x 900mm x 260 mm)
Weight lbs/ kg	123 lbs / 56kg
Safety Certifications	UL1741 UL1741SA&SB all options UL1699B FCC part 15 class B CSA - C22.2 NO.107.1-01 RSD(NEC690.5,11,12)
Grid Connection Standards	IEEE 1547 IEEE 2030.5 HECO Rule 14H CA Rule 21 Phase I,II,III,CEC CSIP SRD2.0 OGPe NOM California Prop65 SGIP

*Reference Technical Notes for additional information

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