

The NeoVolta NV14 is a complete, fully integrated Alternating Current (AC) or Direct Current (DC) Solar, 208V Commercial and/or 120V/240V Residential Hybrid Inverter Energy Storage System (ESS). It includes a Lithium Iron Phosphate (LiFePO<sub>4</sub>) rechargeable battery system with UL 9540A certification for photo voltaic energy conversion and storage, which allows consumers to use their own solar generation after the sun has set. The NV14 also allows consumers to power their homes in grid outages using either their solar or their stored energy in the battery system. The NV14 weighs 560 pounds, the NV24 weighs 270 pounds, and both must be ground mounted.

### INVERTER SPECIFICATIONS

BAT Voltage	48 V DC (44 V - 54 V)
BAT Current	175A DC
AC Voltage	208V or 120V / 240V AC (Split Phase)
AC Frequency	60 Hz (55 Hz - 65 Hz)
AC Input/Output Current	32A AC (grid tie)
AC Input Power	7,680 W

#### Output

Nominal AC Power Output	7,680 W
Max. AC Power Output	8,448 W (10 seconds)
Max. Continuous Output Current	32A AC

#### Input

<b>PV</b>	* AC PV 38A (9,200 W) 125V minimum
Max. AC Power Input Current*	** DC PV 10,000 W T WO DC MPPTs
Max. DC PV Power Input (STC)**	(5,000 Watts, 500 V & 26A per MPPT)
	Range 125 VDC to 460 VDC

Operating Temperature -25.C to 60.C (>45.C derating)

DC = Direct Current AC = Alternating Current W = Watts  
 V = Volts A = Amps Hz = Hertz

\* 9,200 W (38A) of maximum AC PV may be used.

\*\* 10,000 W of DC PV may be used. DC Solar will be clipped to 8,448 (maximum inverting rate) once the battery system has been fully charged.

\*\*\* Maximum solar input is 10,000 W combined for both AC and DC solar applications (minimum of 1,000 W must be AC solar)

### BATTERY SPECIFICATIONS

#### NOMINAL CHARACTERISTICS

Nominal Voltage	48 V
Typical Capacity	100Ah (25.C)
Typical Energy	14,400 Wh
Volumetric Density	122.3 Wh/dm
Gravimetric Density	102.1 Wh/Kg

#### ELECTRICAL CHARACTERISTICS

Voltage Window	44.0 V ~ 54.0 V
Max Permanent	
Discharge Current	155A (7,680 W/Hr)
Max Permanent	
Charge Current	100A (5,000 W/Hr)
Energy Charge Efficiency	97% (20.C)

#### OPERATION ENVIRONMENT

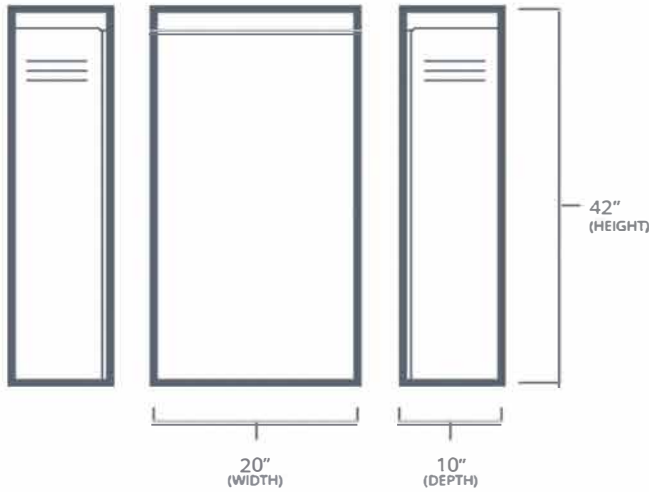
Charge Temperature	0.C to 55.C
Discharge Temperature	-20.C to 60.C
Storage Temperature	-20.C to 60.C



QUESTIONS

**800 364 5464**

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The NeoVolta NV24 is an additional 9,600 W battery capacity option that combines with the NV14. Total energy storage capacity is increased from 14.4 kWh to 24.0 kWh of Lithium Iron Phosphate (LiFePO4) re-chargeable battery. The NV24 weighs 270 pounds and has to be ground mounted.

### BATTERY SPECIFICATIONS

#### NOMINAL CHARACTERISTICS

Nominal Voltage	48 V
Typical Capacity	100 Ah (25.C)
Typical Energy	9,600 Wh
Volumetric Density	122.3 Wh/dm
Gravimetric Density	102.1 Wh/Kg

#### ELECTRICAL CHARACTERISTICS

Voltage Window	44.0 V ~ 54.0 V
Max Permanent Discharge Current	155 A (7,680 W/Hr)
Max Permanent Charge Current	100 A (5,000 W/Hr)
Energy Charge Efficiency	97% (20.C)

#### OPERATION ENVIRONMENT

Charge Temperature	0.C to 55.C
Discharge Temperature	-20.C to 60.C
Storage Temperature	-20.C to 60.C

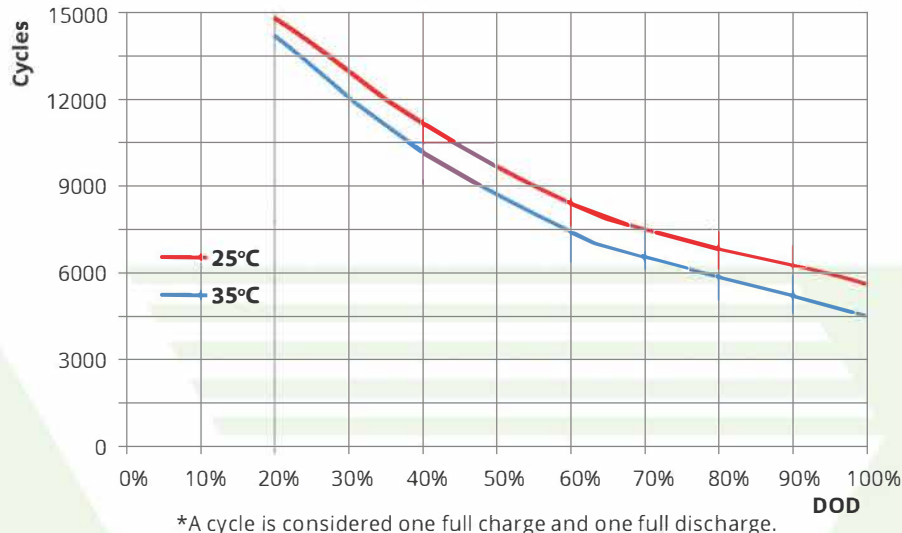
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## NV14/24 CYCLE LIFE VS DEPTH OF DISCHARGE (6,000 cycles at 90% DOD)



## NV14/24 ENERGY STORAGE SYSTEM CERTIFICATIONS

- Underwriters Laboratories (UL) 9540, 9540A, 1973, 1741, 1642, and 1699B Arc Fault Circuit Protection Type 1
- UL 1741 third edition (including UL 1741 Supplemental SB)
- UL 9540A Battery Energy Storage System (ANSI/CAN/UL 9540:2020)
- Institute of Electrical and Electronics Engineers (IEEE) 1547:201B (Revision 1547:2002), 1547a2020, 1547.1-2020 (SRD V2.0) (Third Edition)
- Grid Regulation: VDE 0126, AS4777, NRS2017, G9B, G99, International Electrical Code (IEC) 62B97, IEC 16B3, IEC 62116, IEC 61727, IEC 1000-6-1, IEC 62109-1, IEC 62109-2
- EMC: EN61000-6-1, EN 61000-6-3, Federal Communications Commission (FCC) 15 Class B
- Electrical Codes: National Fire Protection Association's NFPA 70 National Fire Codes (NEC) 2023
- California Public Utilities Commission (CPUC) Rule 21 Interconnection
- Hawaii Electric Companies Source Requirement Document Version 1.1 (SRD-UL-1741-SA-V1.1)
- CSA Group C22.2 No. 107.1:2001 Ed. 3, C22.2 No. 107.1-16
- Telergon AC/DC Disconnect ZFV55 VZVH4 AB
- National Electrical Manufacturers Association (NEMA) Type 3R
- California Energy Commission (CEC): Grid Support Utility, Utility Interactive, Energy Storage System
- California installs: Residential: Intended "for use in residential dwelling units."



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