INVOLTEK ENERGY POWERED BY PHILADELPHIA SOLAR

PHILADELPHIA SOLAR
DELIVERING CLEAN ENERGY SOLUTIONS

Lithium Iron Phosphate (LiFePO4) Battery

NVS Series

5.1~30 KWH

CE IEC MSDS UN38.3

NVS19 inches rack standard backup battery is based on Lithium iron phosphate battery equipment or energy storage system in household. It has excellent safety power newly of excellent safety and high reliability.

*** Custom capacity is acceptable.**

High cycle life
6000 cycles @ 80% DOD, 25 for effectively lower total of ownership cost.

Function
Support parallel operation

Longer service life
Low maintenance batteries with stable chemistry.

BATTERY PACK SPECIFICATION

Item	General Parameter		Item	General Parameter
Voltage	51.2V		Battery Type	LifePO4 (LFP)
Rated Capacity	Typical	100Ah	Operation Temperature Range	Charge: 0~55°C
	Discharge	0.5 C		Discharge: -20~55°C
Voltage at end of Discharge	46.4V		Discharge Cut-off Voltage	40V
Charging Voltage	58.40V		Storage Temperature Range	0°C~45°C
Max Discharging current	100A (50A Recommended)		Dimensions	478*475*132.5mm
Max Charging Current (Icm)	100A (50A Recommended)		Color	Black/White
Limited Charging Voltage (Ucl)	54.75V		Full Weight	42kg±1kg

BASIC PARAMETERS

Life cycle (80% DOD, 70% SOH, 25°C)	6000 Cycles
Storage time / temperature	5 months @ 25°C; 3 months @ 35°C; 1 month @ 45°C
Operation temperature	Charging 20°C to 45°C Discharging -20°C to 60°C @60+/-25% Relative Humidity
Lithium Battery Standard	CE, ROHS, IEC62619,IEC62133, UN38.3,MSDS
Enclosure protection rating	IP21

BATTERY MANGEMENT SYSTEM FUNCTION

Overcharge detection function
Over discharge detection function
Over current detection function
Short detection function
Temperature detection function
Communication:CAN and RS485

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Lithium Iron Phosphate (LiFePO4) Battery

NVW Series

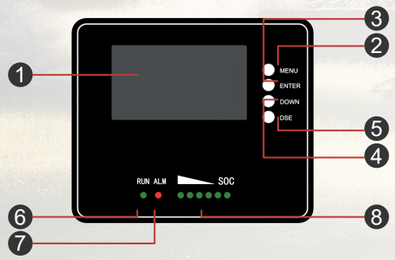
1.28~10.24KWH

UN38.3

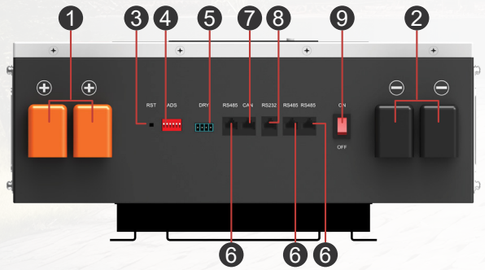
NVW Series wall mounted Lithium battery (LiFePO4 Battery) solutions are highly integrated, deep cycle backup power solutions for your solar home energy storage system. With rich experience and advanced techniques, the product has the features of the fashionable design, high energy, high power density, long service life, and easiness of installation and expansion.

*** Custom capacity is acceptable.**

Pic of Input & Output Port



1. LCD display
2. Menu buttons
3. Enter buttons
4. Down buttons
5. DES buttons
6. RUN indicator
7. Alarm indicator
8. SOC indicator



1. BAT+
2. BAT-
3. RST port
4. ADS switch
5. DRY port
6. RS485 communication port
7. CAN port
8. RS232 communication port
9. Start buttons

NVS Series

Technical Data		NVW-2450	NVW-24100	NVW-24200	NVW-4850	NVW-48100	NVW-48200
Nominal Voltage			25.6V			51.2V	
Nominal Capacity		50Ah	100Ah	200Ah	50Ah	100Ah	200Ah
Nominal energy		1280Wh	2560Wh	5120Wh	2560Wh	5120Wh	10240Wh
Life Cycles		6000 cycles @ 80% DOD, 25					
Recommended Charge Voltage			29.2V			58.4V	
Recommended Charge Current		10A	20A	40A	10A	20A	40A
End Of Discharge Voltage			22V			44V	
Standard Method	Charge	10A	20A	40A	10A	20A	40A
	Discharge	25A	50A	100A	25A	50A	100A
Maximum Continuous Current	Charge	50A	100A	100A	50A	100A	100A
	Discharge	50A	100A	100A	50A	100A	100A
BMS Cut-Off Voltage	Charge	29.2 V (3.65V/Cell)			58.4 V (3.65V/Cell)		
	Discharge	22.0V (2s) (2.75V/Cell)			32.0V (2s) (2.0V/Cell)		
Temperature	Charge	-4 ~ 113 (0 ~ 45)					
	Discharge	-4 ~ 131 (-20 ~ 55)					
Storage Temperature		23~95 (-5~35)					
Shipment voltage		≥25.6V			≥51.2V		
Module Parallel		Up to 15 units					
Communication		CAN2.0/RS232/RS485					
Case Material		SPPC					
Dimension (L x W x H)		340x400x140 mm	450x400x140 mm	450x400x140 mm	450x400x140 mm	580x490x145 mm	580x490x145 mm
Approx. Weight		13.8kg	23kg	45kg	23kg	44kg	82kg
Charge Retention And Capacity Recovery Capability		Standard charge the battery, and then put aside at room temperature for 28d or 55 for 7d, Charge retention rate≥90%, Recovery rate of charge≥90					
Certification & Standards		CE-EMC (EN 61000-6-3: 2007+A1: 2011+AC: 2012 EN IEC 61000-6-1: 2019) IEC62619-1:2018; IEC62619:2022; IEC62619:2017; UN38.3/ MSDS					

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Lithium Iron Phosphate (LiFePO4) Battery

NVG Series

14.3~15.3KWH

CE IEC SMD UN38.3

NVG Series is a lithium battery specially designed for residential applications with superior performance. Compatible with INVOLTEK PV/EP/PH inverters series, one-stop-shop solution can be designed with NVG series, save you precious time and money , ideal solution for large home and small commercial with strong capacity 14.3kWh/15.3kWh.

Smart Control
· Remote diagnosis & update
· Auto reboot after undervoltage

Friendly and Thoughtful Design
· 8KW continous/module, 20KW @10s peak/module
· 15 Units in parallel maxium

Superb Safety & Reliability
· Reliable LFP technology with high cycle stability
· Longer cycle life 6000 cycles @ 80% DOD, 25

Flexible & Adaptable Applications
· 14.3 - 15.3kWh strong capacity range
· Compatible with INVOLTEK PV/PH/EP inverters

NVG Series

Technical Data	NVG-48280	NVG-48300
Nominal Voltage	51.2V	
Nominal Capacity	280Ah	300Ah
Nominal energy	14336Wh	15360Wh
Life Cycles	6000 cycles @ 80% DOD, 25	
Recommended Charge Voltage	57.6V	
Recommended Charge Current	56A	60A
End Of Discharge Voltage	44V	
Standard Charge Current	56A	60A
Standard Discharge Current	140A	150A
Maximum Continuous Charge Current	200A	200A
Maximum Continuous Discharge Currentt	200A	200A
BMS Cut-Off Voltage Charge	58.4 V (3.65V/Cell)	
BMS Cut-Off Voltage Discharge	22.0V (2s) (2.75V/Cell)	
Temperature Charge	-4 ~ 113 (0 ~ 45)	
Temperature Discharge	-4 ~ 131 (-20 ~ 55)	
Storage Temperature	23~95 (-5~35)	
Shipment voltage	≥25.6V	
Module Parallel	Up to 15 units	
Communication	CAN2.0/RS232/RS485	
Case Material	SPPC	
Dimension (L x W x H)	733*260*635mm	
Approx. Weight	115kg	120kg
Charge Retention And Capacity Recovery Capability	Standard charge the battery, and then put aside at room temperature for 28d or 55 for 7d, Charge retention rate≥90%, Recovery rate of charge≥90	
Certification & Standards	CE-EMC(EN 61000-6-3: 2007+A1: 2011+AC: 2012 EN IEC 61000-6-1: 2019) UN38.3/ MSDS / IEC62619:2017	

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