

Smart Energy Storage Solutions Combo

FOR RESIDENTIAL

(1KW-5KW)













WAAREE ESS is a leading global energy storage solution and service provider. At Waaree ESS we manufacture lithium-ion batteries & Solutions for residential, Commercial, utility scale projects & Electric Vehicles. We manufacture smart, efficient and modular Energy Storage Solutions for emission-free clean energy needs. WAAREE ESS is a leading global energy storage solution and service provider. Waaree ESS has a vision to build India's "new age fuel" company and their passion for excellence motivates them to be the top preferred brand among customers.

Waaree ESS is the energy storage arm of Waaree Group - a billion-dollar Indian group and our flagship company Waaree energies ltd. is largest solar module manufacturer in the world outside of China. We have 33+ years of industry experience and are manufacturing house for over 10 Global Fortune 100 companies. Our products are sold in over 20+ countries and our employee strength stands at over 7000.

Global Certifications

















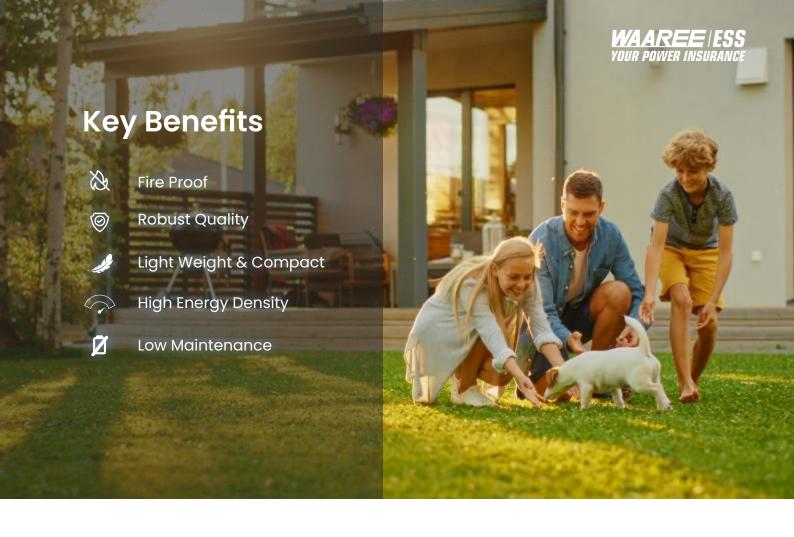
1 KW - 5 KW Smart Combo from Generation to Storage

We at Waaree understand electricity better & committed towards making energy efficient & smart through combination of technologically advanced products which offer higher efficiency low failure rate and are incredibly easy to install.

Key Features

- Increased Return on Investment
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- \chi Installer Friendly
- Smart Solutions

- Safer Equipment
- More Efficient
- High Reliable



Smart Energy Storage Solutions

(48V/54AH - 48V/172AH)



Key Features

Fit for All PV Inverters

All in one module

Continuous Energy Backup

24/7 Online Monitor

Safe and Reliable

Easy Installation and Expansion



Generate Power through High Efficiency Solar Panels

540 Wp Mono PERC

Key Features



Highest reliability & enhanced crack tolerant 10BB Module



Module utilizing Half cut cell for optimum performance



Highly efficient Mono PERC M10 Cells



Highest Commercial gains, lower LCOE



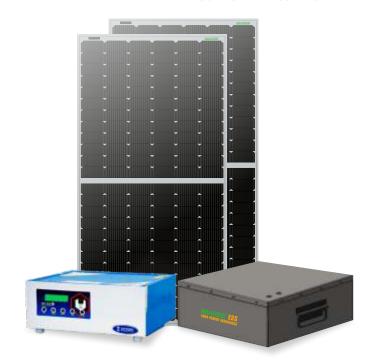


48 V / 54 AH WAAREE ESS Lithium ion Battery

WAAREE 540Wp Solar Panel

48 V / 1 KVA Inverter





General Specification

Battery Chemistry	LFP
Battery Rated Voltage (V)	48 V
Battery Rated capacity (Ah)	54 Ah
Battery Rated Energy (KWh)	2.59 KWh

Protection Features

Over Temperature Protection	Yes
Under Temperature Protection	Yes
Over discharge Current Protection	Yes
Short circuit Current Protection	Yes

Performance Characteristics

Charging Voltage (V)	54 V ±0.5V
Discharging Voltage (V)	42 V ±1V
Nominal Charge Current (A)	10 A
Nominal Discharge Current (A)	16 A
Maximum Charge Current (A)	15 A
Maximum Discharge Current (A)	30 A
Operating Voltage Range (V)@80%DoD	54 V to 42 V ± 0.5 V
Operating Temperature (°C)	Discharge 0 to 55 °C Charge 0 to 45 °C
Storage time	1 month @ 0-40°C, 1-3 month @ 18-35°C, Charge once a month
Cycle Life of Battery	>2000 Cycle @25°C, 0.2C Charge, 0.3C Discharge. 80% DoD.

Mechanical Characteristics

Dimension (WXDXH)	350 x 340 x 187 mm +/-2 mm
Weight (Kg)	24 ± 2 Kg
Casing	MS Metal Cabinet with Powder Coating (IP20)
Power Connector	Power Terminal (M8)



1.5 KW Solar Combo

48 V / 86 AH WAAREE ESS Lithium ion Battery

WAAREE 540Wp Solar Panel

48 V / 1.5 KVA Inverter



Battery Pack Specification

General Specification

Battery Chemistry	LFP
Battery Rated Voltage (V)	48 V
Battery Rated capacity (Ah)	86 Ah
Battery Rated Energy (KWh)	4.1 KWh

Protection Features

Over Temperature Protection	Yes
Under Temperature Protection	Yes
Over discharge Current Protection	Yes
Short circuit Current Protection	Yes

Performance Characteristics

Charging Voltage (V)	54 V ±0.5V
Discharging Voltage (V)	42 V ±1V
Nominal Charge Current (A)	25 A
Nominal Discharge Current (A)	40 A
Maximum Charge Current (A)	30 A
Maximum Discharge Current (A)	86 A
Operating Voltage Range (V)@80%DoD	54 V to 42 V ± 0.5 V
Operating Temperature (°C)	Discharge 0 to 55 °C Charge 0 to 45 °C
Storage time	1 month @ 0-40°C, 1-3 month @ 18-35°C, Charge once a month
Cycle Life of Battery	>3000 Cycle @25°C, 0.3C Charge, 0.5C Discharge. 90% DoD.

Mechanical Characteristics

Dimension (WXDXH)	482 x 490 x 175 mm +/-2 mm
Weight (Kg)	42 ± 2 Kg
Casing	MS Metal Cabinet with Powder Coating (IP20)
Power Connector	Power Terminal (M8)



48 V / 80 AH & 100 AH WAAREE ESS Lithium ion Battery

WAAREE 540Wp Solar Panel

48 V / 2 KVA Inverter



Battery Pack Specification

General Specification

Battery Chemistry	LFP
Battery Rated Voltage (V)	48 V
Battery Rated capacity (Ah)	86 Ah
Battery Rated Energy (KWh)	4.1 KWh

Protection Features

Over Temperature Protection	Yes
Under Temperature Protection	Yes
Over discharge Current Protection	Yes
Short circuit Current Protection	Yes

Performance Characteristics

Charging Voltage (V)	54 V ±0.5V
Discharging Voltage (V)	42 V ±1V
Nominal Charge Current (A)	25 A
Nominal Discharge Current (A)	40 A
Maximum Charge Current (A)	30 A
Maximum Discharge Current (A)	86 A
Operating Voltage Range (V)@80%DoD	54 V to 42 V ± 0.5 V
Operating Temperature (°C)	Discharge 0 to 55 °C Charge 0 to 45 °C
Storage time	1 month @ 0-40°C, 1-3 month @ 18-35°C, Charge once a month
Cycle Life of Battery	>3000 Cycle @25°C, 0.3C Charge, 0.5C Discharge. 90% DoD.

Mechanical Characteristics

Dimension (WXDXH)	482 x 490 x 175 mm +/-2 mm
Weight (Kg)	42 ± 2 Kg
Casing	MS Metal Cabinet with Powder Coating (IP20)
Power Connector	Power Terminal (M8)



48 V / 100 AH - 172 AH WAAREE ESS Lithium ion Battery

WAAREE 540Wp Solar Panel

48 V / 3 KVA Inverter



Battery Pack Specification

General Specification

Battery Chemistry	LFP
Battery Rated Voltage (V)	48 V
Battery Rated capacity (Ah)	172 Ah
Battery Rated Energy (KWh)	8.256 KWh

Protection Features

Over Temperature Protection	Yes
Under Temperature Protection	Yes
Over discharge Current Protection	Yes
Short circuit Current Protection	Yes

Performance Characteristics

Charging Voltage (V)	53.5 V ±0.5V
Discharging Voltage (V)	42 V ±1V
Nominal Charge Current (A)	50 A
Nominal Discharge Current (A)	80 A
Maximum Charge Current (A)	60 A
Maximum Discharge Current (A)	100 A
Operating Voltage Range (V)@80%DoD	53.5 V to 42 V ± 0.5 V
Operating Temperature (°C)	Discharge 0 to 55 °C Charge 0 to 45 °C
Storage time	1 month @ 0-40°C, 1-3 month @ 18-35°C, Charge once a month
Cycle Life of Battery	>3000 Cycle @25°C, 0.3C Charge, 0.5C Discharge. 90% DoD.

Mechanical Characteristics

Dimension (WXDXH)	582 x 650 x 175 mm +/-2 mm
Weight (Kg)	90 ± 2 Kg
Casing	MS Metal Cabinet with Powder Coating (IP20)
Power Connector	Power Terminal (M8)



48 V / 100 AH - 172 AH WAAREE ESS Lithium ion Battery

WAAREE 540Wp Solar Panel

48 V / 5 KVA Inverter



General Specification

Battery Chemistry	LFP
Battery Rated Voltage (V)	48 V
Battery Rated capacity (Ah)	86 Ah
Battery Rated Energy (KWh)	4.1 KWh

Protection Features

Over Temperature Protection	Yes
Under Temperature Protection	Yes
Over discharge Current Protection	Yes
Short circuit Current Protection	Yes

Performance Characteristics

Charging Voltage (V)	54 V ±0.5V
Discharging Voltage (V)	42 V ±1V
Nominal Charge Current (A)	25 A
Nominal Discharge Current (A)	40 A
Maximum Charge Current (A)	30 A
Maximum Discharge Current (A)	86 A
Operating Voltage Range (V)@80%DoD	54 V to 42 V ± 0.5 V
Operating Temperature (°C)	Discharge 0 to 55 °C Charge 0 to 45 °C
Storage time	1 month @ 0-40°C, 1-3 month @ 18-35°C, Charge once a month
Cycle Life of Battery	>3000 Cycle @25°C, 0.3C Charge, 0.5C Discharge. 90% DoD.

Mechanical Characteristics

Dimension (WXDXH)	482 x 490 x 175 mm +/-2 mm
Weight (Kg)	42 ± 2 Kg
Casing	MS Metal Cabinet with Powder Coating (IP20)
Power Connector	Power Terminal (M8)

WAAREE | ESS YOUR POWER INSURANCE



WAAREE ESS PVT LTD.

Shed No 2, Plot No 334, Road No 3, Raj Kamal Chokadi, Sachin GIDC, 394 230.

