

## Overview

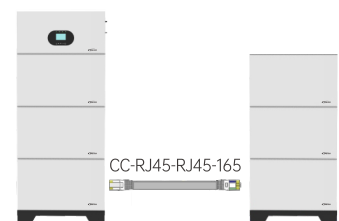
The ROH-H series is an all-in-one energy storage system that combines lithium batteries with off-grid energy storage inverters. This product can accommodate up to 6 lithium battery modules and 1 off-grid energy storage inverter host. Each lithium battery module has a capacity of 5.12 kwh, with a maximum configurable capacity of up to 30.72 kwh.

The off-grid energy storage inverter host integrates grid/oil generator charging, solar charging, utility bypass, inverter output, and smart energy management. Multiple charging and AC output modes are available for users to select configure, allowing flexible utilization of solar energy or grid power, achieving high-efficiency energy utilization.

The product features an ultra compact design for wall-mounted installation, saving space. Users can satisfy their demand for large-capacity energy storage power by combining the main unit with various numbers of batteries.

## Features

- Ultra-compact design for wall-mounting
- High-durability lithium batteries (over 6000 cycles)
- Pure sine wave output
- Main unit supports single-phase and three-phase parallel operation (up to 12 units)
- Dual PV input support enhances PV utilization efficiency
- RS485 communication interface, optional Bluetooth, WiFi, 4G,etc.
- Remote monitoring via App
- Historical data recording function, storage capacity of 25000 records
- Comprehensive electronic protection
- Operating temperature range: -20°C to 50°C



## Technical Specifications

Model	ROH5542H-05X1P20	ROH5542H-10X2P20	ROH5542H-15X3P20	ROH5542H-20X4P20	ROH5542H-25X5P20	ROH5542H-30X6P20
<b>Utility input</b>						
Utility Voltage	176VAC~264VAC (Default), 90VAC~280VAC (Configurable)					
Utility Frequency	45Hz~65Hz					
Maximum Utility Charging Current	100A					
Switch Response Time	Inverter to Utility: 10ms			Utility to Inverter: 20ms		
<b>Inverter output</b>						
Inverter Rated Power (@35°C)	5500W					
3-second Transient Surge Output Power	8500W					
Inverter Output Voltage	220/230VAC					
Inverter Frequency	50/60Hz					
Output Voltage Waveform	Pure sine wave					
Load Power Factor	0.2~1(VA ≤ Rated output power)					
Output Voltage Harmonic Distortion Rate	≤3% (48V resistive load)					
Maximum Load Efficiency	92%					
Maximum Inverter Efficiency	94%					
<b>Solar controller</b>						
PV Maximum Open-circuit Voltage	500V					
MPPT Voltage Range	85~400VDC					
Number of MPPTs	2					
PV Maximum Input Current	15A+15A					
PV Maximum Input Power	6000W					
PV Maximum Charging Current	100A					
MPPT Maximum efficiency	≥99.5%					
<b>Battery</b>						
Battery Type	LiFePO4 lithium battery					
Battery Module	5.12KWH,51.2V/100AH					
Number of Modules	1	2	3	4	5	6
Battery Rated Voltage	51.2VDC					
Energy Capacity	5.12KWH	10.24KWH	15.36KWH	20.48KWH	25.6KWH	30.72KWH
Battery Work Voltage Range	Discharging Mode: 0°C~+50°C, Charging Mode: -20°C~+50°C					
<b>Others</b>						
No-load Losses	<1.0 A					
Standby Current	<0.15A					
Installation	Hang stack (Stack first, then fix on the wall)					
<b>Environmental parameters</b>						
Work Temperature Range	-20°C~+50°C					
Storage Temperature Range	-25°C~+60°C					
Enclosure	IP20					
Relative Humidity	< 95% (N.C.)					
Altitude	4000m (>2000m Derating)					
<b>Mechanical parameters</b>						
Dimension (L x W x H)	665mmx160mm x833mm	665mmx160mm x1236mm	665mmx160mm x1639mm	665mmx160mm x2042mm	665mmx160mm x2445mm	665mmx160mm x2848mm
N.W of inverter	19.8kg					
N.W of complete package	74.4kg	122.8kg	171.2kg	219.6kg	268.0kg	316.4kg