

TECHNICAL SPECIFICATIONS



MODEL		5KL-48V
CAPACITY		5000VA/5000W
INPUT		
Voltage		220/230/240 VAC
Voltage Range		110-280 VAC @ 50% load ; 176-280 VAC @ 100% load
Frequency Range		46~54 Hz or 56~64 Hz
Power Factor		≥ 0.98 @ Nominal Voltage (100% Load)
THDI		≤ 8%
OUTPUT		
Output Voltage		220/230/240 VAC
AC Voltage Regulation (Batt. Mode)		± 1%
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz
Current Crest Ratio		3:1
Harmonic Distortion		≤ 3% THD (Linear Load), ≤ 5 % THD (Non-linear Load)
Transfer Time	AC Mode to Batt. Mode	Zero
	Inverter to Bypass	4 ms (Typical)
Waveform		Pure Sinewave
EFFICIENCY		
Line Mode		93.0%
ECO Mode		99.5%
Battery Mode		91.0%
BATTERY		
Battery Voltage		48 VDC
Floating Charge Voltage		54.6 VDC
Overcharge Protection		66 VDC
Charging Current (max.)		60 A
INDICATORS		
LCD Panel		Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator Via LCD
PHYSICAL		
Dimension, D x W x H(mm)		465 x 190 x 318
Net Weight (kgs)		15.5
Communication Interface		RS232 & USB
OPERATING ENVIRONMENT		
Humidity		0 to 95% Relative Humidity(Non-condensing)
Operating Temperature		0°C to 50°C
Storage Temperature		-15°C to 60°C

TECHNICAL SPECIFICATIONS



Model	ES R-4850	ES R-48100
Battery Type	LiFePO4 (lithium iron phosphate battery)	
Nominal Capacity	50Ah	100Ah
Nominal Voltage	51.2V	51.2V
Total Energy	2560Wh	5120Wh
Usable Energy	2300Wh	4800Wh
Charge Cut-off Voltage	57.6V	57.6V
Discharge Cut-off Voltage	48V	48V
ConL. Charge Current	25A	50A
Max ConL. Charge Current	50A	100A
ConL. Discharge Current	20A	50A
Max ConL. Discharge Current	50A	100A
Peak discharge Current (3S)	55A	110A
Communication Mode	RS232, RS485, CAN	
Ingress Protection	IP20	
Scalability	max 16pcs in parallel	
Lifespan (80% DOD)	≥6000 cycles, 25°C	
Compatible Inverters	Goodwe, Victron, SMA, Kosta, Fronius, Solis, Growatt, Sofar, Deye, Solar Ark, Outback, Voltronic, Pylontech optional, more brands will be announced	
Working Environment	-20°C-60°C, < 95% RH	
Storage Environment	-20°C~50°C, < 95% RH	
Operating Altitude	<2000m	
Weight	27KG	48KG
Size (Wx D x H, mm)	433×425×133mm	433×425×220mm
Design Life	15 years	
Warranty Period	5 years (10 years optional)	