



RUNNER — RS series

- * 99.5% MPPT efficiency, 97% conversion efficiency.
- * Exclusively designed heat dissipation channel, quieter and more stable operation.
- * OLED blue display status information.
- * Built-in lithium battery activation function.
- * Support lead-acid, lithium iron phosphate and ternary lithium batteries charging.
- * Support user-defined, lead-acid and li-ion battery charging.
- * Complete protection functions to ensure stable operation for battery system.
- * Support PC, wired instrument, and remote App monitoring.
- * RJ45 Dual interfaces, support parallel function, integrated management and secondary development.
- * CE, FCC, RoHS certification.



Focus on the MPPT Solar Controller
More Professional, More Reliable

Application scene



Home photovoltaic system



Energy storage system



Solar monitoring



Communication base station, etc.

Runner -RS Technical data

Runner -RS Series		RS48L40	RS48L50	RS48L60	RS48L80	RS48L100
Product Category						
MPPT efficiency		≥99.5%				
Standby power		1W~1.8W				
Heat-Dissipating method		Built-in fan for cooling				
Lead-acid battery system		12V System : 9VDC~15VDC		24V System : 18VDC~30VDC		
Lithium-ion battery system		36V System : 32VDC~40VDC		48V System : 42VDC~60VDC		
		8VDC~60VDC				
Input Characteristics						
Max.PV input voltage(Voc)		150VDC				
Min.Vmpp Voltage		Battery voltage + 2V				
Start-up charging voltage		Battery voltage + 3V				
Low input voltage protection		Battery voltage + 2V				
Over voltage protection / Recovery		150VDC/145VDC				
Reted PV Power	12V system	560W	700W	840W	1120W	1400W
	24V system	1120W	1400W	1680W	2240W	2800W
	36V system	1680W	2100W	2520W	3360W	4200W
	48V system	2240W	2800W	3360W	4480W	5600W
Charge Characteristics						
Activation for lithium battery		Optional				
Battery type (default setting gel-sealed lead-acid battery)		Sealed(SEL),Gel(GEL),Flooded(FLD),User-defined(USER),Li-ion(LIT)				
Rated charge current		40A	50A	60A	80A	100A
Temperature compensation		-3mV/°C/2V				
Charge method		3 stages: CC (Constant current) - CV (Constant voltage) - CF (Floating charge)				
Output voltage stability accuracy		±0.2V				
LOAD Characteristics						
Load voltage		Same as battery voltage				
Rated load current		30A			50A	
Load control mode		On/Off , PV voltage control mode, Dual-time control mode, PV + Time control mode				
Low voltage protection		Can be set				
Setting method		PC software / APP / Controller				
Display & Communication						
Display		Blue OLED display				
Communication		Dual RJ45 port / RS485 / support PC software monitoring / support WiFi module for APP cloud monitoring / support centralized parallel monitoring				
Other Parameters						
Protections		Input & output over-volt / low-voltage protection, reverse polarity protection, over-heating protection, battery shedding protection etc.				
Operating ambient temperature		-20℃~+50℃				
Storage temperature		-40℃~+75℃				
IP(Ingress protection)		IP21				
Altitude		0~3000m				
Max. connection size		28mm²				
Recommended breaker		≥63A	≥ 63A	≥ 100A	≥ 120A	≥ 150A
Net weight/Gross weight (kg)		2 / 2.6			5 / 6.2	
Product size /Packing size (mm)		305x185x90/370x218x98			380x210x80/490x350x195	