



samlexamerica®

EVOLUTION™



Programmable Remote Control
Model: EVO-RC
(Sold Separately)

Inverter/Charger

⚡ Pure Sine Wave

Models:

- EVO-2212
- EVO-3012
- EVO-2224
- EVO-4024

3 YEAR LIMITED WARRANTY



INVERTER	EVO-2212	EVO-3012	EVO-2224	EVO-4024
NOMINAL AC OUTPUT, FREQUENCY, THD	120 ± 5% VAC, Single Phase, 60 Hz/ 50 Hz ± 0.1 Hz, Pure Sine Waveform < 5% THD			
INPUT BATTERY VOLTAGE RANGE	9.1 - 17 VDC	9.1 - 17 VDC	18.1 - 34 VDC	18.1 - 34 VDC
CONTINUOUS POWER OUTPUT AT 25° C	2200 VA	3000 VA	2200 VA	4000 VA
CONTINUOUS AC OUTPUT CURRENT (A)	18A	25A	18A	33A
SURGE POWER FOR 1 MS	300% (6600VA, 54A)	300% (9000VA, 75A)	300% (6600VA, 54A)	300% (12000VA, 99A)
SURGE POWER FOR 100 MS	200% (4400VA, 36A)	200% (6000VA, 50A)	200% (4400VA, 36A)	200% (8000VA, 66A)
POWER BOOST FOR 5 SECONDS	150% (3300W)	150% (4500W)	150% (3300W)	150% (6000W)
POWER BOOST FOR 30 SECONDS	140% (3080W)	140% (4200W)	140% (3080W)	140% (5600W)
POWER BOOST FOR 5 MINUTES	120% (2640W)	120% (3600W)	120% (2640W)	120% (4800W)
POWER BOOST FOR 30 MINUTES	110% (2420W)	110% (3300W)	110% (2420W)	110% (4400W)
MAXIMUM CONTINUOUS DC INPUT CURRENT	266A	373A	133A	266A
INVERTER EFFICIENCY (PEAK)	90%	90%	93%	94%
NO LOAD POWER CONSUMPTION	Normal Mode: 30W; Power Saving Mode: <8W; Standby Mode: <5W		Normal Mode: 25W; Power Saving Mode: <8W; Standby Mode: <5W	
AC INPUT FROM GRID/GENERATOR	120 VAC Nominal (60 - 140 VAC ± 5% selectable) ; 60Hz / 50Hz (40 - 70 Hz selectable)			
PROGRAMMABLE AC INPUT CURRENT	5-40A (Default 30A)	5-70A (Default 30A)	5-40A (Default 30A)	5-70A (Default 30A)
TRANSFER RELAY	TRANSFER RELAY TYPE AND CAPACITY			
	SPDT, 40A	DPDT, 70A (2X35A contacts in parallel)	SPDT, 40A	DPDT, 70A (2X35A contacts in parallel)
TRANSFER TIME: INVERTER TO GRID/GENERATOR	< 1 ms (Synchronized transfer at zero crossing)			
TRANSFER TIME: GRID/GENERATOR TO INVERTER	Up to 16 ms (Synchronized transfer at zero crossing)			
INTERNAL BATTERY CHARGER	AC INPUT VOLTAGE RANGE			
	120 VAC Nominal (60 - 140 VAC ± 5% selectable) ; 60Hz / 50Hz (40 - 70 Hz selectable)			
MAXIMUM AC INPUT CURRENT	15A, AC	20A, AC	19A, AC	30A, AC
PROGRAMMABLE CHARGING CURRENT AND VOLTAGE	0-100A ; 12-16.5 VDC	0-130A ; 12-16.5 VDC	0-70A ; 24-33 VDC	0-110A ; 24-33 VDC
POWER FACTOR	> 0.95			
CHARGER EFFICIENCY	75%	75%	86%	85%
CHARGING PROFILES	7 types of charging profiles to cover Lead Acid, Lithium Ion & Nickel-Zinc types of batteries: (i) Three, 3-Stage Profiles (with Adaptive Control) (ii) Three, 2-Stage Profiles (iii) One, 4-Stage Equalization Profile (Adaptive Control)			
BATTERY TEMPERATURE COMPENSATION	Battery Temperature Sensor included. Compensation Range from -20°C to 60°C			
BATTERY CHARGER EXTERNAL INPUT (SOLAR INPUT)	CHARGING INPUT VOLTAGE RANGE			
	13 - 16.5 VDC	13 - 16.5 VDC	26 - 33 VDC	26 - 33 VDC
MAXIMUM CHARGING CURRENT	50A			
COOLING	2 Fans – Temperature Controlled, Variable Speed			
PROTECTIONS/ALARM	Battery Low Voltage Alarm and Low / Over Voltage Shut Down; Shut Down under Input Over Current, Output Over Current, Output Overload and Output Short; Transformer and Heat Sink Overheat Shut Down; Immunity Against Conducted Electrical Transients in Vehicles			
COMPLIANCE	SAFETY/EMI/EMC/RoHSETL listed to ANSI/UL Standards: 1741 & 458 (with Marine Supplement), and to CAN/CSA C22.2 No. 107.1-01. Compliant with RoHS Directive 2011/65/EU ; EMI/EMC compliant with FCC Part 15(B), Class A.			
ENVIRONMENTAL	TEMPERATURE			
	OPERATING: -20°C to 60°C (-4°F to 140°F); STORAGE: -40°C to 70°C (-40°F to 158°F)			
	OPERATING HUMIDITY			
	0 to 95% RH non condensing			
WEIGHT AND DIMENSIONS	W x D x H			
	325 x 426 x 207mm / 12.79 x 16.77 x 8.15 inches			
	WEIGHT			
	27 Kg / 59 lb	29 kg / 64 lb	26 Kg / 57 lb	29 Kg / 64 lb

Note: (1) All AC power ratings in the Inverter Section are specified at Power Factor = 0.95
 (2) All specifications given above are at Ambient Temperature of 25°C / 77°F unless specified otherwise
 (3) Specifications are subject to change without notice

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