



samlexamerica®

EVOLUTION™



Inverter/Charger

⚡ Pure Sine Wave

Models:

EVO-2212E

EVO-3012E

EVO-2224E

EVO-4024E

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

2 YEAR LIMITED WARRANTY



INVERTER	EVO-2212E	EVO-3012E	EVO-2224E	EVO-4024E
NOMINAL AC OUTPUT, FREQUENCY, THD	230VAC ± 5%, 50/60 Hz ± 0.1 Hz, < 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)	10A	13A	10A	18A
SURGE POWER FOR 1 MSEC	300% (6600VA, 30A)	300% (9000VA, 39A)	300% (6600VA, 30A)	300% (12000VA, 52A)
SURGE POWER FOR 100 MSEC	200% (4400VA, 20A)	200% (6000VA, 26A)	200% (4400VA, 20A)	200% (8000VA, 35A)
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 Save Mode: <8W		Normal Mode: 25W; Power Save Mode: <8W	
AC INPUT FROM GRID/GENERATOR	230 VAC Nominal (140 - 280VAC ± 5%, 50/60 Hz Selectable)			
PROGRAMMABLE AC INPUT CURRENT	5-20A (Default 16A)	5-25A (Default 16A)	5-20A (Default 16A)	5-35A (Default 16A)
TRANSFER RELAY	TRANSFER RELAY TYPE AND CAPACITY: SPDT, 40A			
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: 230 VAC Nominal (140 - 280VAC ± 5%, 50/60 Hz Selectable)			
MAXIMUM AC INPUT CURRENT	9 Amps, AC	12 Amps, AC	10 Amps, AC	18 Amps, AC
MAXIMUM DC OUTPUT CURRENT	100 Amps, DC	130 Amps, DC	70 Amps, DC	110 Amps, DC
POWER FACTOR	> 0.95			
CHARGER EFFICIENCY	75%	75%	86%	85%
CHARGING STAGES	Adaptive Charging Control; Normal Mode: 3 Stages – Bulk, Absorption, Float; Equalization Mode: 4 Stages – Bulk, Absorption, Equalization, Float			
BATTERY TEMPERATURE COMPENSATION	Battery Temperature Sensor included. Compensation Range from -20°C to +60°C			
EXTERNAL BATTERY CHARGER INPUT (FROM SOLAR CHARGE CONTROLLER)				
CHARGING INPUT VOLTAGE RANGE	13 - 16VDC	13 - 16VDC	26 - 32VDC	26 - 32VDC
MAXIMUM CHARGING CURRENT	50A			
COOLING	2 Fans – Temperature Controlled, Variable Speed			
PROTECTIONS/ALARM	Input Over Current, Output Overload, Short Circuit, Over Temperature, Battery Low Voltage /Over Voltage, Immunity Against Conducted Electrical Transients in Vehicles			
COMPLIANCE	SAFETY/EMI/EMC/RoHS2		CE marked, RoHS2	
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

Notes: (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 unless specified otherwise
(3) Specifications are subject to change without notice

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