



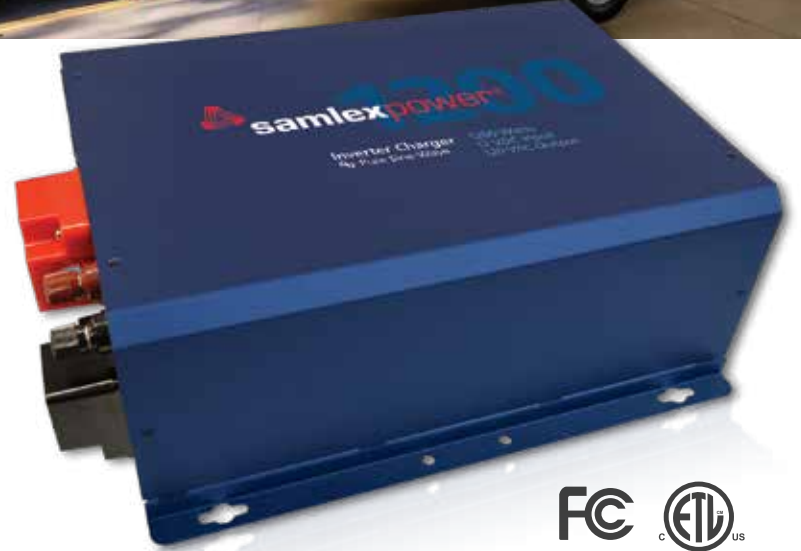
EVO™ F SERIES INVERTER/CHARGERS Mobile Fleet Power Solutions



EVO™ F SERIES

Pure Sine Wave Inverter/Charger with 6 programmable charging profiles – 2, 3 and 4 stages with Equalization. For use with Lead Acid or Lithium Batteries.

- User configurable Timed or Adaptive algorithm to charge a wide range of battery types
- Zero transfer time switching from inverter to grid, synchronized transfer at zero crossing
- 3X Surge power with Power Boost
- GFCI & Hardwired models available
- Wide Operating Temperature Range -20 to 60°C / -4 to 140°F



2 YEAR LIMITED WARRANTY

Models Available

EVO-1212F
EVO-1212F-HW*

1200 Watts
120V | 12 VDC

EVO-1224F
EVO-1224F-HW*

1200 Watts
120V | 24 VDC

* Hardwired



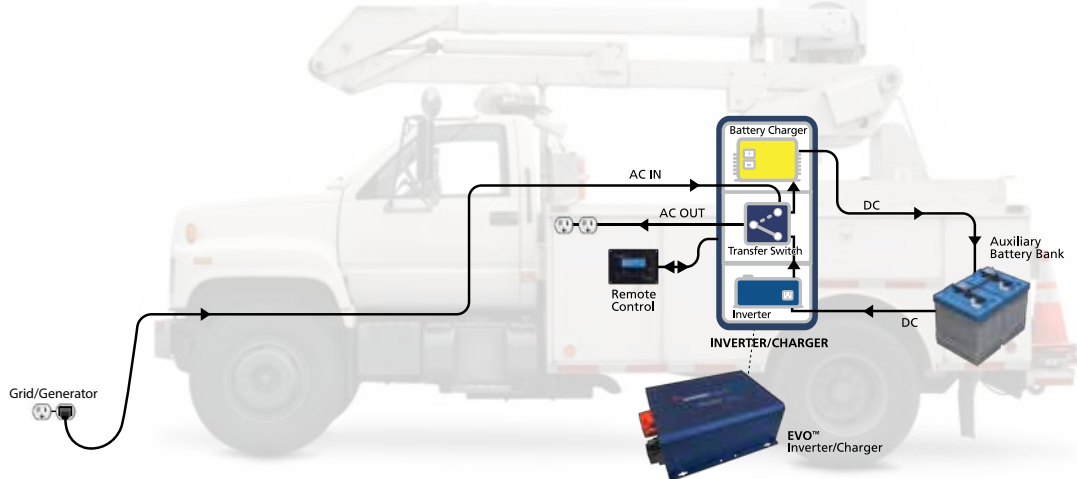
EVO-RC-PLUS

Optional Remote Control with Removable SD Card for Data Logging

The EVO-RC-PLUS remote control can accept up to 16GB SD card to capture data.

1-800-561-5885

www.samlexamerica.com



MODEL NO.	EVO-1212F / EVO-1212F-HW	EVO-1224F / EVO-1224F-HW
INVERTER SPECIFICATIONS		
OUTPUT WAVEFORM	Pure Sine Wave	
INPUT BATTERY VOLTAGE RANGE	9.1 - 17 VDC	18.1 - 34 VDC
NOMINAL AC OUTPUT VOLTAGE	120 VAC ± 5%	
OUTPUT FREQUENCY	60 Hz ± 0.1 Hz	
TOTAL HARMONIC DISTORTION OF PURE SINE WAVE FORM (THD)	< 5%	
CONTINUOUS OUTPUT POWER AND POWER FACTOR (PF)	1200 Watt at PF = 0.95	
CONTINUOUS AC OUTPUT CURRENT	10A	
SURGE POWER FOR 1 MSEC	300% (3600VA, 30A)	
SURGE POWER FOR 100 MSEC	200% (2400VA, 20A)	
POWER BOOST FOR 30 SEC	150% (1800W at PF = 0.95)	
POWER BOOST FOR 1 MIN	140% (1680W at PF = 0.95)	
POWER BOOST FOR 10 MIN	120% (1440W at PF = 0.95)	
POWER BOOST FOR 30 MIN	110% (1320W at PF = 0.95)	
MAXIMUM CONTINUOUS DC INPUT CURRENT	152A	76A
INVERTER EFFICIENCY (PEAK)	89%	91%
NO LOAD POWER CONSUMPTION IN POWER SAVING MODE	< 8 W	
NO LOAD POWER CONSUMPTION IN NORMAL MODE (120 VAC OUTPUT, TYPICAL)	20 watts	20 watts
NO LOAD POWER CONSUMPTION IN STANDBY MODE	< 5W	
AC INPUT		
AC INPUT VOLTAGE	120VAC (60-140VAC +/- 5% selectable)	
AC INPUT FREQUENCY	60Hz	
MAXIMUM PROGRAMMABLE (DEFAULT) AC INPUT CURRENT	5 - 20A (Default - 20A)	
AC INPUT BREAKER SIZE	(i) 20A EVO-1212F and EVO-1224 have built-in Breaker (ii) For EVO-1212F-HW and EVO-1224F-HW, breaker has to be installed externally by the installer / user.	
TRANSFER CHARACTERISTICS		
TRANSFER RELAY TYPE AND CAPACITY	SPDT, 30A	
TRANSFER TIME – INVERTER TO GRID / GENERATOR	< 1 ms (Synchronized transfer at zero crossing)	
TRANSFER TIME – GRID / GENERATOR TO INVERTER	Up to 18ms (Synchronized transfer at zero crossing)	
INTERNAL BATTERY CHARGER		
AC INPUT VOLTAGE RANGE	120 VAC (60 to 140 VAC +/-5% selectable) ; 60 Hz	
MAX CONTINUOUS AC INPUT CURRENT AT MAXIMUM BULK CHARGING CURRENT	11.2A, AC (At BULK CURRENT = 60 ADC)	11.2A, AC (At BULK CURRENT = 40 ADC)
AC INPUT POWER FACTOR	> 0.95	
PROGRAMMABLE BULK CHARGING CURRENT	0 - 60A, DC	0 - 40A, DC

MODEL NO.	EVO-1212F / EVO-1212F-HW	EVO-1224F / EVO-1224F-HW
INTERNAL BATTERY CHARGER		
PROGRAMMABLE CHARGING VOLTAGES:		
BULK / ABSORPTION	13.5 to 16.0V (Default 14.4V)	27.0 to 32.0V (Default 28.8V)
FLOAT STAGE	13.0 to 15.0V (Default 13.5V)	26.0V to 30.0V (Default 27.0V)
EQUALIZATION STAGE	14.0 to 16.0V (Default 14.4V)	28.0 to 32.0V (Default 28.8V)
PROGRAMMABLE CHARGING PROFILES	<ul style="list-style-type: none"> 3 profiles under 3-Stage Charging: Bulk, Absorption, Float 1 profile under 4-Stage Charging: Bulk, Absorption, Equalize, Float 2 profiles under 2-Stage Charging: Bulk, Absorption 	
BATTERY TEMPERATURE COMPENSATION	<ul style="list-style-type: none"> Battery Temperature Sensor included Compensation Range from -20°C to 60°C 	
CHARGER EFFICIENCY	75%	86%
EXTERNAL BATTERY CHARGER (SOLAR CHARGE CONTROLLER)		
CHARGING VOLTAGE RANGE	13 - 16 VDC	26 - 32 VDC
MAXIMUM CHARGING CURRENT	50A	
COOLING, PROTECTIONS AND ALARMS		
COOLING	2 Fans – Temperature Controlled, Variable Speed	
PROTECTIONS AND ALARMS	<ul style="list-style-type: none"> 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 	
BUILT-IN OVER CURRENT BREAKERS	Input: 20A Output: 15A	• For EVO-1212F and EVO-1224F only.
INPUT AND OUTPUT CONNECTIONS		
BATTERY CONNECTION	Stud and Nut: M8 (Pitch 1.25mm)	
EXTERNAL CHARGE CONTROLLER CONNECTION	Stud and Thumb Nut: M6 (Pitch 1mm)	
AC INPUT CONNECTION	(i) EVO-1212F and EVO-1224F: <ul style="list-style-type: none"> IEC 60320 C-20 Male Power Inlet Plug. Requires 20A Detachable Power Cord with mating IEC 60320 C-19 Socket Connector and NEMAS-20P Plug (ii) EVO-1212F-HW and EVO-1224F-HW: <ul style="list-style-type: none"> Terminal Block 	
AC OUTPUT CONNECTION	(i) EVO-1212F and EVO-1224F: <ul style="list-style-type: none"> NEMAS-15P, Duplex GFCI Outlet, 15A (ii) EVO-1212F-HW and EVO-1224F-HW: <ul style="list-style-type: none"> Terminal Block 	
ENVIRONMENTAL SPECIFICATIONS		
OPERATING TEMPERATURE	-20°C to +60°C (-4°F to 140°F)	
STORAGE TEMPERATURE	-40°C to +70°C (-40°F to 158°F)	
OPERATING HUMIDITY	0 to 95% RH non condensing	
WEIGHTS AND DIMENSIONS		
DIMENSIONS: W X D X H	324 x 415 x 148 mm; 12.76 x 16.34 x 5.83 in	
WEIGHTS	17.6 Kg / 38.8 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 / 77°F unless specified otherwise
 (3) Specifications are subject to change without notice