



**samlex**america®

Power Conversion Products  
220 VAC / 230 VAC



Samlex is your complete source for commercial, industrial and consumer power conversion products.



### **Best Customer Service In The Industry**

Talk to someone the first time you call, guaranteed.



### **Technical Support**

Engineers and support personnel are available to answer your technical inquiries.

Innovative Product Design, Strict Quality Control, Industry Proven Power Conversion Products, Over 200 Production Models Available.

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## Customization

Samlex offers OEM and private label opportunities for specialty components and finished power conversion products.



## Online Tools

FAQs, Run-Time Calculator,  
Detailed Product Info, Videos.

[samlexamerica.com](http://samlexamerica.com)

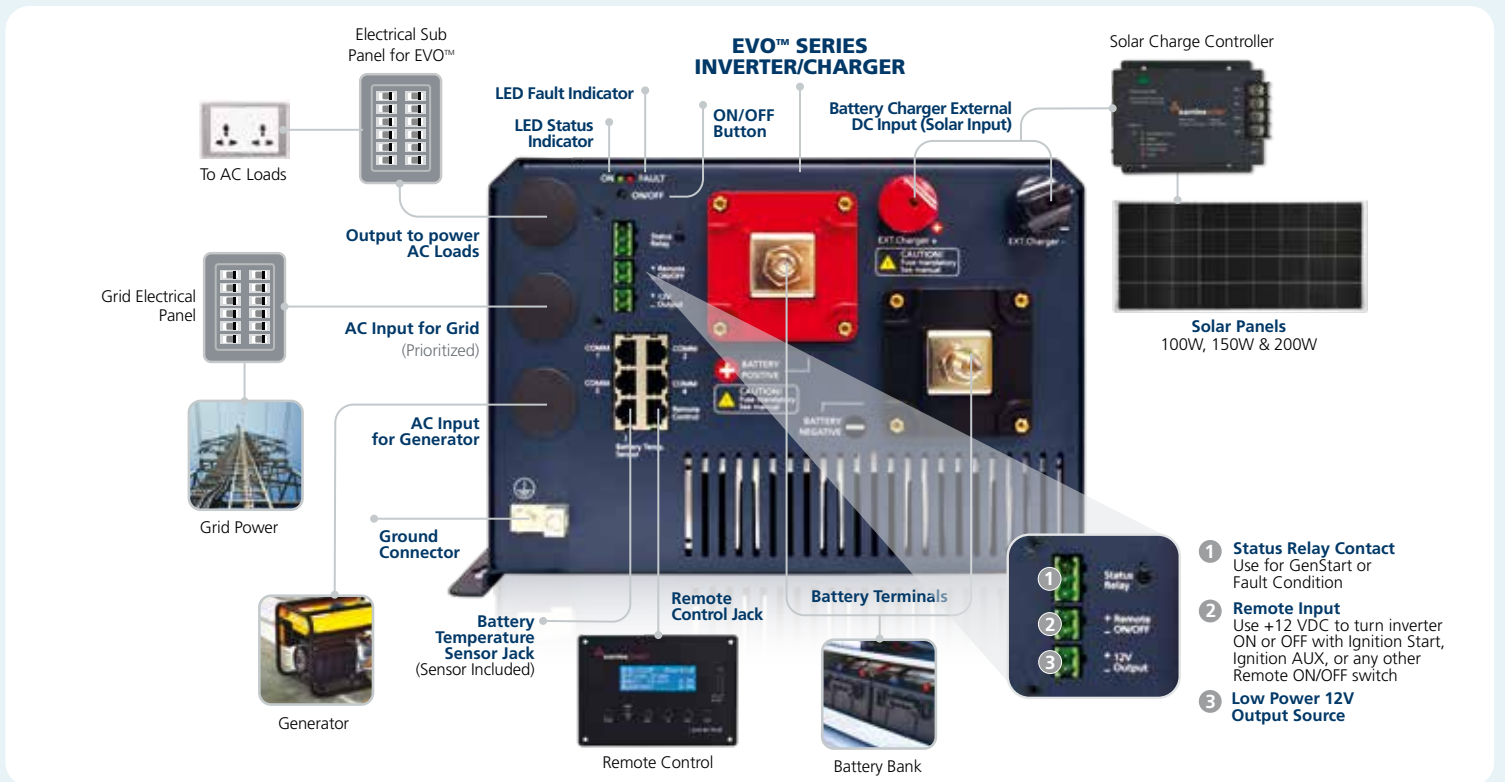
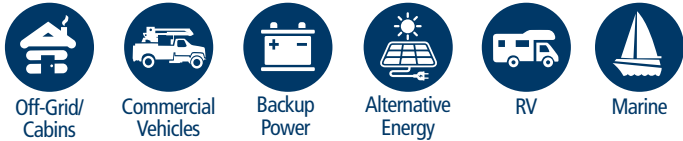
# EVOLUTION™ SERIES

## Pure Sine Wave Inverter/Chargers

### How an Inverter/Charger works...

The primary function of an inverter/charger is to charge a bank of batteries and convert power from the batteries into usable AC power (the same type you receive from the wall at home).

The EVO™ inverter/charger can accept input from the grid, a generator or a solar charge controller to charge a bank of batteries; all of which can be connected at the same time. The unit will automatically switch between power sources as they become available - ensuring the batteries are charging efficiently and the AC loads are being powered without delay.



# EVOLUTION™ SERIES

## Pure Sine Wave Inverter/Chargers



EVO-4248SP

### All Evolution™ Series Inverter/Charger Features

- DC Input for solar charge controller
- Configurable Multi-Stage high current Battery Charger with Equalization
- User configurable Timed or Adaptive algorithm to charge a wide range of battery types, including lithium
- Zero transfer time switching from inverter to grid, synchronized transfer at zero crossing
- 3X Surge power with Power Boost
- Conformally coated circuit boards
- Wide Operating Temperature Range -20 to 60°C / -4 to 140°F



### Applications

- |                           |                        |
|---------------------------|------------------------|
| Marine                    | Off-grid               |
| Recreational vehicles     | Cabins                 |
| Trucks/Specialty vehicles | Rural electrification  |
| Alternative energy        | Emergency backup power |

Choose a unit based on the power you need as all EVO™ Inverter/Chargers have a similar footprint.

### EVO™ Features

- Two separate AC inputs for Grid (priority input) and Generator
- 230V models available

Built with state of art technology. The 2200W - 4000W inverter/chargers are the reliable choice for multiple applications.



### EVO™ SP Features

- 48 VDC uses smaller cables, without loss of power
- 120V/240 split phase
- 100A external battery connection connects to a MPPT solar charge controller and a large solar array

A better way to do off-grid. Run 120V or 240V appliances, utilizing the full power of a household electrical panel.



# EVOLUTION™ SERIES

## Pure Sine Wave Inverter/Chargers



EVO-RC



EVO-RC-PLUS

### All Evolution™ Series Remote Controls

(sold separately)

- Programmable parameters, profiles, and the ability to monitor status and alarms for EVO™ Inverter/Chargers
- Power ON/OFF, or switch to Standby Mode
- SD card slot holds up to 32GB card to log historic power consumption, inverter function, battery charging activity, faults and the conditions during use
- Comes with 10 M / 33 ft RJ-45 data cable

### EVO-RC

- 2 rows of 20 character alpha numeric LCD display
- Lightweight plastic enclosure
- Compatible with EVO™ 2200W-4000W Inverter/Chargers, including 230V models

### EVO-RC-PLUS

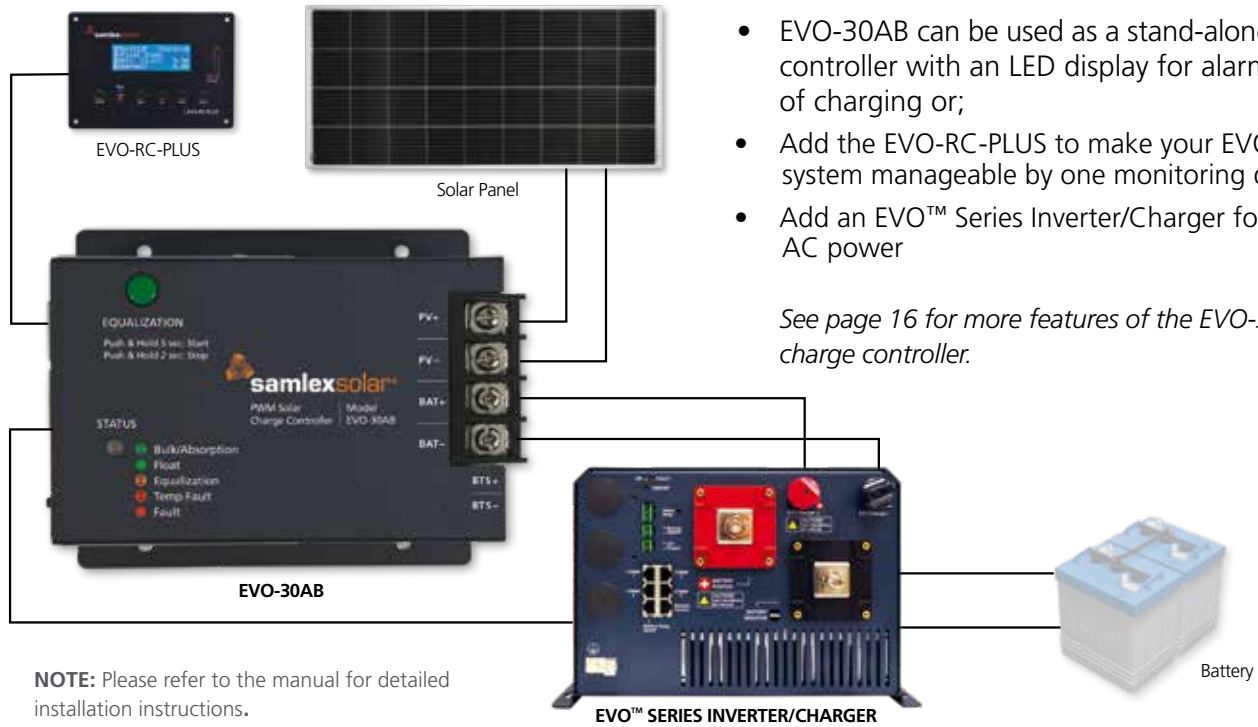
- 4 rows of 20 character alpha numeric LCD display
- Robust metal enclosure
- Compatible with all EVO™ Series Inverter/Chargers

### MODELS

Model No.	Input (VDC)	Output (VAC)	Output Power (W)	Battery Charger (A)	Transfer Relay (A)	Weight (lbs)	Dimensions (in)
EVO-2212E	12	230	2200	100	40	59	12.79 x 16.77 x 8.15
EVO-3012E	12	230	3000	130	40	64	12.79 x 16.77 x 8.15
EVO-2224E	24	230	2200	70	40	57	12.79 x 16.77 x 8.15
EVO-4024E	24	230	4000	110	40	64	12.79 x 16.77 x 8.15
EVO-4248SP	48	120 / 240	4200	60	40	64	12.8 x 16.3 x 8.35
EVO-RC	Optional Remote Control for use with EVO-2212E, EVO-3012E, EVO-2224E, EVO-4024E					0.4	12.79 x 16.77 x 8.15
EVO-RC-PLUS	Optional Remote Control for use with all EVO™ Inverter/Charger models					0.6	12.79 x 16.77 x 8.15

# EXPAND YOUR EVO™ ECO-SYSTEM

## Solar Charge Controller & Remote Control



### Features

- EVO-30AB can be used as a stand-alone solar charge controller with an LED display for alarms and the status of charging or;
- Add the EVO-RC-PLUS to make your EVO™ power system manageable by one monitoring device
- Add an EVO™ Series Inverter/Charger for reliable AC power

*See page 16 for more features of the EVO-30AB charge controller.*



# PST E SERIES (230 VAC) Pure Sine Wave Inverters



PST-60S-12E

## Features

- Silent Operation – temperature controlled fan reduces energy consumption
- Extremely low interference with other devices
- Low idle power draw
- Clean and reliable AC power identical to household electricity
- Wide operating DC input range
- Universal Protection Circuit: low voltage, over voltage, over temperature, over load and short circuit
- 50 Hz / 60 Hz (Switch selectable: 50 Hz default)

## Applications

- |                                |                                               |
|--------------------------------|-----------------------------------------------|
| Solar power systems            | Telecommunication                             |
| Emergency backup power         | Field work/construction sites                 |
| Mobile offices                 | Home electronics:<br>TV, DVD, gaming consoles |
| Cordless tool chargers         | Tools and appliances                          |
| Recreational vehicles, camping | Computer and printers                         |
| Automotive & Marine            |                                               |



## RC-300

- For use with 3000 Watt models
- LCD indicates AC volts, AC amps, frequency, power (watts) and power factor
- 25' of cable



RC-300

Use a remote control when you want to hide your inverter or it's in a hard place to reach.

## MODELS

Model No.	Input (VDC)	Output (VAC)	Output Power (W)	Surge (W)	Weight (lbs)	Dimensions (inches)	Outlets (Schuko)
PST-15S-12E	12	230	150	300	2.8	9.8 x 6.1 x 2.5	1
PST-30S-12E	12	230	300	500	2.9	9.8 x 6.1 x 2.5	1
PST-60S-12E	12	230	600	1000	5.4	11.1 x 9.5 x 3.2	1
PST-100S-12E	12	230	1000	2000	8.8	15.7 x 9.5 x 3.2	1
PST-150S-12E	12	230	1500	3000	12.7	16.3 x 11.1 x 4	2
PST-200S-12E	12	230	2000	4000	13.0	16.3 x 11.1 x 4	2
PST-300S-12E	12	230	3000	6000	21.6	17.97 x 10.35 x 5.71	1
PST-15S-24E	24	230	150	300	2.8	9.8 x 6.1 x 2.5	1
PST-30S-24E	24	230	300	500	2.9	9.8 x 6.1 x 2.5	1
PST-60S-24E	24	230	600	1000	5.4	11.1 x 9.5 x 3.2	1
PST-100S-24E	24	230	1000	2000	8.8	15.7 x 9.5 x 3.2	1
PST-150S-24E	24	230	1500	3000	12.7	16.3 x 11.1 x 4	2
PST-200S-24E	24	230	2000	4000	13.0	16.3 x 11.1 x 4	2
PST-300S-24E	24	230	3000	6000	21.6	17.97 x 10.35 x 5.71	1
RC-15	Optional remote for 600 - 2000W models.						
RC-300	Optional remote for 3000 Watt models. 25' cable. Detailed monitoring and remote power operation.						



# SAM SERIES

## Modified Sine Wave Inverters



SAM-450-12

### Features

- Compact design, durable construction
- Load controlled cooling fan
- Low battery input alarm
- Universal protection circuit: thermal, battery, overload, short circuit, earth fault
- Soft start technology

### Applications

- |                                |                               |
|--------------------------------|-------------------------------|
| Solar power systems            | Telecommunication             |
| Emergency backup power         | Field work/construction sites |
| Service vehicles               | Home electronics:             |
| Mobile offices                 | TV, DVD, gaming consoles      |
| Recreational vehicles, camping | Tools & appliances            |

**Includes 12V power plug and battery clamps.**



12V Power Plug



Battery Clamps

### MODELS

Model No.	Input (VDC)	Output (VAC)	Output Power (W)	Surge (W)	Weight (lbs)	Dimensions (inches)	Outlets
SAM-450-12E*	12	230	450	900	1.30	6.0 x 6.1 x 1.80	1

\* Comes with 12V power plug

† Comes with battery clamps



# INVERTER ACCESSORIES

## Installation Kits, Fuses & Circuit Protection



DC-2500-KIT

Connect your inverter to a battery bank safely and simply. Each kit contains a pair of heavy duty cables, a fuse assembly with replaceable fuse, and all of the necessary hardware.

Samlex uses the highest quality of industrial grade, flexible cables suitable to be used as battery cables for automotive and renewable energy applications.

### Features

Cable Features:

- 600V rating
- Wide operating temperature of -50°C to 105°C
- High strand count, annealed and tinned copper conductors for high flexibility
- Has layers of insulation that provide resistance to abrasion, oils, acids and heat
- Ethylene Propylene Rubber (EPR) jacket provides the high 600V insulation and resistance to abrasion, oils, acids and heat

### Applications

- |                                |                               |
|--------------------------------|-------------------------------|
| Solar power systems            | Telecommunication             |
| Emergency backup power         | Field work/construction sites |
| Mobile offices                 | Home electronics              |
| Recreational vehicles, camping | Tools and appliances          |
| Automotive                     | Computer and printers         |

## Fuses & Circuit Protection



DC-FA-100



DC-FB-2



MRBF-300



JLLN-400



CFB2-400

### SPECIFICATIONS

Kit / Model	Inverter / Description	Fuse Size	Cable Gauge	Cable Length
DC-1000-KIT	PST-60S-12E, PST-100S-24E, PST-150S-24E, PST-60S-48E	100 Amps	AWG #4	2 x 10'
DC-2000-KIT	PST-100S-12E, PST-200S-24E, PST-300S-24E, EVO-2224E	200 Amps	AWG #2	2 x 10'
DC-2500-KIT	PST-150S-12E, PST-200S-12E, EVO-4024E	300 Amps	AWG #2/0	2 x 10'
DC-2500-KIT-XL	PST-150S-12E, PST-200S-12E, EVO-4024E	300 Amps	AWG #2/0	2 x 15'
DC-3500-KIT	PST-300S-12E, EVO-2212E	400 Amps	AWG #4/0	2 x 10'
DC-FA-100	100 Amps Fuse Bar Assembly			
DC-FA-200	200 Amps Fuse Bar Assembly			
DC-FA-300	300 Amps Fuse Bar Assembly			
DC-FB-2	Double Pole Fuse Bar with Insulating Cap (no fuse)			
MRBF-100	100 Amps Replacement Fuse			
MRBF-200	200 Amps Replacement Fuse			
MRBF-300	300 Amps Replacement Fuse			
CFB2-400	400 Amps Replacement Fuse			
JLLN-400	400 Amps Fuse Block Assembly			

# SEC UL SERIES

## Battery Chargers



SEC-1215UL

The SEC UL Series Battery Chargers are fully automatic and based on Samlex's industry proven design that professionals have depended on for years.

### Features

- Switch mode technology for high efficiency, lightweight and quiet operation
- 120 or 230 VAC, 50/60 Hz (user selectable)
- Automatic operation for ALL Lead Acid Batteries: Flooded, AGM or Gel Cell
- User Selectable (by DIP Switch) for 2 or 3 stage, rapid and safe charging of stand-alone and loaded Lead Acid Batteries
- Can be used as a power supply or DC UPS when used in conjunction with a battery
- Universal Protection Circuit – short circuit, overload, reverse battery polarity
- Charge 2 to 3 banks of batteries at once – no isolator necessary
- Optional remote LED panel (select models)
- Temperature Compensated Charging (select models)
- Half power mode (select models)

### Applications

- |                       |                            |
|-----------------------|----------------------------|
| Automotive            | Communication sites        |
| Recreational vehicles | Battery back-up systems    |
| Marine                | Alternative energy systems |



### 900-RC Remote Control

The 900-RC Remote Control comes with a 33' cable. The Remote Panel can be used to power ON/OFF and also monitor the charging status from a remote location.



900-RC

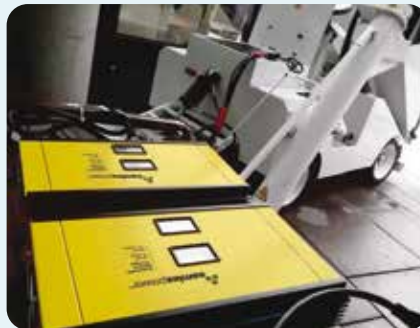
Temperature sensor prevents under/over charging of battery if temperature varies extensively.



### MODELS

Model No.	VDC	Amps	Weight (lbs)	Dimensions (inches)	Temp. Sensor	Half Power Mode	Optional Remote
SEC-1215UL	12	15	4.8	8.6 x 8.4 x 3.3	-	-	-
SEC-1230UL	12	30	6.4	11.0 x 8.4 x 3.3	-	-	-
SEC-1250UL	12	50	9.0	13.03 x 9.6 x 3.82	Yes	Yes	900-RC
SEC-1280UL	12	80	9.0	15.0 x 9.61 x 3.82	Yes	Yes	900-RC
SEC-2415UL	24	15	6.4	11.0 x 8.4 x 3.3	-	-	-
SEC-2425UL	24	25	9.0	13.03 x 9.6 x 3.82	Yes	Yes	900-RC
SEC-2440UL	24	40	9.0	15.0 x 9.61 x 3.82	Yes	Yes	900-RC

900-RC Remote Control. Comes with 33' cable.

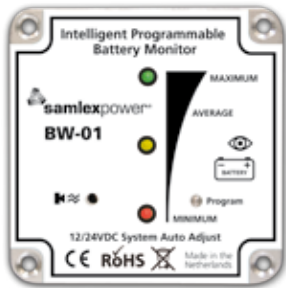


# ISOLATOR, GUARDS & MONITORS

## Battery Accessories



BG-200



BW-01



BW-03

### Features

#### Battery voltage protectors

Extends battery life; prevents damage to connected components

- Program disconnect/reconnect at 10 different voltages settings
- Protects against excessive voltage caused by faulty alternators or chargers
- Prevents excessive discharge of batteries
- Automatic voltage detection, 12 VDC or 24 VDC
- Models: BG-40, BG-60 and BG-200

#### Battery Monitors

- 12 VDC or 24 VDC programmable monitor
- Displays battery state of charge through LED patterns
- BW-03 monitors 2 batteries
- Models: BW-01 and BW-03

### Applications

Marine  
Automotive  
Recreational & Utility Vehicles  
Renewable energy  
Commercial/Industrial  
Communications



## ACR-160 Automatic Charge Isolator

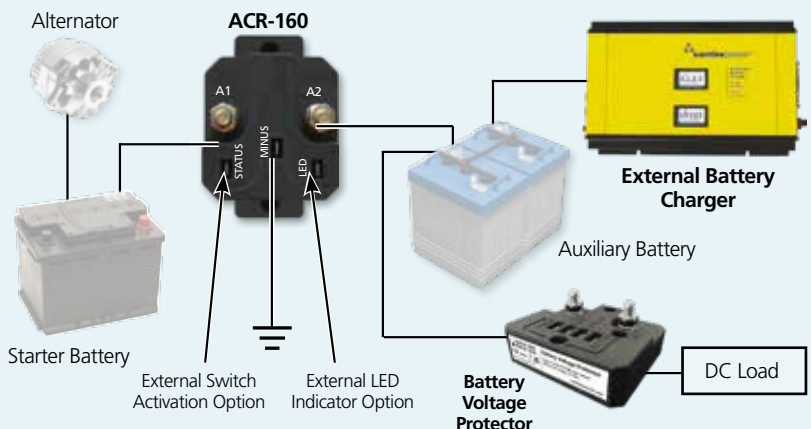
ACR-160 is a voltage dependent switch that separates or parallels starter and auxiliary battery banks. Protects the starter battery from deep discharge, and charges both battery banks while prioritizing starter battery without having to resize the alternator or rewire the system. Also known as a Battery Separator or Automatic Charging Relay.



ACR-160

### MODELS

Model No.	Description	Amps (A)	Weight (lbs)	Dimensions (inches)	Compliance
ACR-160	Automatic Charge Isolator	160	1.0	4.2 x 2.9 x 2.3	-
BG-40	Battery Guard	40	0.5	3.2 x 2.6 x 1.4	CE
BG-60	Battery Guard	60	0.5	3.2 x 2.6 x 1.4	CE
BG-200	Battery Guard	200	0.5	4.5 x 4.7 x 2.4	CE
BW-01	Battery Monitor	-	0.125	2.6 x 2.6 x 0.8	CE
BW-03	Battery Monitor	-	0.2	2.4 x 2.4 x 0.8	CE



NOTE: Please refer to the manual for detailed installation instructions.

# SRV SERIES

## Solar Charging Kits

**NEW  
200W  
KIT**



SRV-200-30A

SRV-150-30A

SRV-100-30A

### Features

- Solar panels constructed with top of the line solar cell, all weather anodize aluminum and tempered glass that comply with the highest industry standards
- High efficiency
- Waterproof connectors
- Resilient in harsh weather conditions
- Flush mount 30A charge controller with LED status indicators, LCD display, battery equalization and 8 charge settings
- Weather resistant 20' solar panel connecting wires
- Aluminum mounting brackets with large surface areas on top for best stability and five drilling holes for convenient installation

All the parts you need to start using solar in a few simple steps.

### Applications

- Solar power systems
- Emergency backup power
- Mobile offices
- Marine
- Lighting systems
- Recreational vehicles, camping
- Automotive
- Telecommunication
- Field work/construction sites

## What's in Your SRV Kit



**NEW** 200W Panel

### Solar Panel

Samlex solar panels are constructed with top of the line solar cells and materials that comply with the highest industry standards.

- High efficiency
- Water proof connectors
- High transparency tempered glass
- Anodized aluminium frames
- Resilient to harsh weather conditions

### MODELS

Model No.	Solar Panel	Panel Weight (lbs)	Panel Dimensions (Inches)	Charging Power
SRV-200-30A	200W	26.4	26.0 x 59.05 x 1.39	9.97A
SRV-150-30A	150W	26.4	26.0 x 58.03 x 1.39	8.82A
SRV-100-30A	100W	17.63	21.73 x 47.25 x 1.39	6.07A



SCC-30AB



### Charge Controller

Samlex 30 Amp Flush Mount Charge Controllers regulate current and protect your batteries from over-charging. Features of this 4-stage Charge Controller include: LED status indicators, LCD display, battery equalization and 8 charge settings for most battery types, including lithium.



SCW-20-2

### Connecting Wires

A pair of weather resistant 20' connecting wires are provided to connect your panel to a charge controller or to an additional panel. Also sold separately.



SM5-KIT

### Mounting Brackets & Hardware

Provided to secure the solar panel to a flat surface while providing space underneath to facilitate cooling. Also sold separately.

**SAMLEX BULK SOLAR PANELS are available by special order.**

# SSP SERIES

## Solar Panel Kits

**NEW**  
**200W**  
**KIT**



SSP-200-KIT

SSP-150-KIT

SSP-100-KIT

Mix and match panels with charge controllers (see pages 15-16) and accessories for a customized solar system. Can also be used to expand SRV Kits.

### Includes:

- High efficiency Solar Panel
- SCW-20-2 Connecting Wires
- SM5-KIT Mounting Brackets & Hardware

### Applications

- |                        |                                |
|------------------------|--------------------------------|
| Solar power systems    | Recreational vehicles, camping |
| Emergency backup power | Automotive                     |
| Mobile offices         | Telecommunication              |
| Marine                 | Field work/construction sites  |
| Lighting systems       |                                |

### MODELS

Model No.	Solar Panel	Panel Weight (lbs)	Panel Dimensions (Inches)	Charging Power
SSP-200-KIT	200W	26.4	26.0 x 59.05 x 1.39	9.97A
SSP-150-KIT	150W	26.4	26.0 x 58.03 x 1.39	8.82A
SSP-100-KIT	100W	17.63	21.73 x 47.25 x 1.39	6.07A

## Solar Accessories

(sold separately)



### ADJ-28

#### Adjustable Solar Panel Tilt Mount

Over 30 adjustable settings from 0-90°. Get up to 40% more out of your solar panel.



### SBC-2-DC

#### Branch Connectors

Connect panels in parallel. Includes (1) male and (1) female. Use to expand SRV kits with SSP panels.



### MC4-2

#### Multi-Contact Connectors

Connect panels in series. Includes (1) male and (1) female.



### SCW-20-2

#### Connecting Wires

Connect your panel to a charge controller or to an additional panel. 20' of cable provided.



### SM5-KIT

#### Mounting Brackets & Hardware

Secures the solar panel to a flat surface, provides space underneath for cooling.



**Customize or expand your solar system based on your power needs.**

# SCC & MSK

## Solar Charge Controllers



SCC-1208L



MSK-10A



MSK-20A

### Features

#### SCC-1208L

- 8 Amps
- Rated IP65, sealed, splash proof weather resistant
- Automatically turns ON lights when dark and turns OFF during the day
- Wide Operating Temperature Range -20 to 60°C / -4 to 140°F

#### MSK-10A

- 10 Amps
- LEDs indicate battery state of charge
- Temperature compensation
- 3-stage intelligent Series Type PWM charging
- Voltage and current regulation
- Reverse protection any combination of solar module and battery
- Programmed for use with sealed GEL batteries
- Automatically detects 12 or 24 Volts
- Optional MSK-TS Temperature Sensor

#### MSK-20A

- 20 Amps
- 3 stage intelligent Series Type PWM charging
- Automatic detection of 12V/24V
- Electronic protections: overheating, overcharging, over discharge, overload and short circuit
- Reverse protection any combination of solar module and battery
- Optional MSK-TS Temperature Sensor



### MODELS

Model No.	Input (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)
SCC-1208L	12	8	0.276	3.8 x 1.8 x 1.0
MSK-10A	12/24	10	0.29	5.46 x 2.73 x 1.46
MSK-20A	12/24	20	0.76	7.36 x 3.75 x 1.77
MSK-TS	Temperature Sensor for MSK-10A and MSK-20A			



MSK-TS

Temperature sensor prevents under/over charging of battery if temperature varies extensively.

# SCC & EVO™ Solar Charge Controllers



SCC-30AB

Regulate current flowing from a solar panel to your batteries and optimize charging. A single 30 Amp Samlex SCC-30AB charge controller can manage multiple panels up to 600W in a 12V system, or up to 1000W in a 24V system under specified conditions.



EVO-30AB

## Features

- 30 Amp charging capacity
- Pulse Width Modulation (PWM) series type
- Dual voltage capability (12V/24V batteries)
- Battery equalization
- 8 charge settings for most battery types, including Lithium



## SCC-30AB

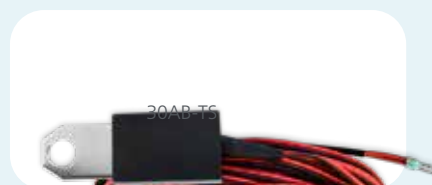
- Flush mount design
- Digital LCD display indicates battery voltage, PC current, PV watts, daily and accumulated Ah, charging stage and battery temperature
- 30AB-TS Temperature Sensor included

## EVO-30AB

- Use as a stand-alone charge controller or expand functionality by adding other EVO™ products
  - When connected to the EVO™ inverter/charger, the EVO-30AB will follow the programming set in the unit
  - Add the EVO-RC-PLUS and it will display alarms and status for both EVO-30AB and EVO™ inverter/charger
- Optional 30AB-TS Temperature Sensor



MODELS				
Model No.	Input (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)
SCC-30AB	12/24	30	0.8	7.48 x 4.25 x 1.38
EVO-30AB	12/24	30	0.8	4.81 x 4.15 x 1.87
30AB-TS	Temperature Sensor			





# MSK SERIES

## Portable Solar Charging Kits



MSK-90 / MSK-135

### Features

- Solar panel is pre-wired with battery clamps for a quick and easy connection, 16' cable
- Turn the panel a few times per day and increase charging by 30%
- Adjustable legs allow for maximum sun exposure
- Folding crystalline panels in anodized aluminum frames, won't rust
- Built-in 10 Amp charge controller manages the charge to the battery and prevents overcharging
- For use with 12V Lead Acid batteries (not included)
- Includes protective carrying case

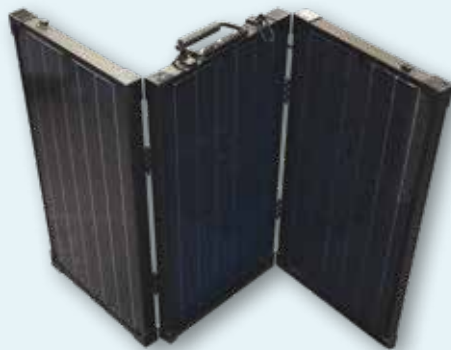
### Applications

Emergency Back-up Power  
Field Work  
Cabins  
Camping  
Marine

Motor Sports  
Remote Locations  
Recreational Vehicles  
Ice Fishing Huts

Take solar with you. Easy to use! Just unfold, attach the pre-wired battery clamps to a battery and start charging.

## What's in Your MSK Kit



Trifold Solar Panel



Protective Carrying Case



10 Amp Built-in Charge Controller



Pre-wired Battery Clamps



2-pin Adapter

### MODELS

Model No.	Solar Output	Cell Type	Weight (lbs)	Dimensions (inches)	Charging Power
MSK-90	90 Watts	Monocrystalline	25.2	40.75 x 25.39 x 1.18	5.68 Amps
MSK-135	135 Watts	Monocrystalline	35.6	59.65 x 24.41 x 1.18	8.52 Amps
MSK-XLR	2-pin XLR Adapter (sold separately)				
MSK-EXT	Extension Cable (sold separately) 10 meters / 33 feet				

### Optional:



MSK-XLR 2-pin XLR Adapter



MSK-EXT Extension Cable

# SUNCHARGER SERIES

## Battery Maintainers



### Features

- Maximum efficiency
- Prevents back flow of current from the battery to the panel
- No need for additional Charge Controller
- Semi-flexible panel construction
- Rugged, weather-proof design
- 10ft cable
- 1ft cable with 12V power plug
- 1ft cable with ring terminals for battery

### Applications

Service vehicles	Cars
Fleet	Trucks
Marine	Motorcycles
ATV's	Recreational vehicles
Private aircrafts	

### Maintenance free!

Perfect for maintaining the battery in your RV, Car, Boat, Motorcycle or ATV with the power of the sun!

Plug into any connected 12V power socket to keep your battery from self discharging. Extends the life of your batteries and saves on replacement costs.

### MODELS

Model No.	Max Power Voltage, $V_{MP}$	Max Power Current, $I_{MP}$	Max Power	Dimensions (inches)	Weight (lbs)
SC-05	12.7 VDC	0.39A	5W	8.03 x 11.22 x 0.52	0.8
SC-10	12.7 VDC	0.79A	10W	14.11 x 11.22 x 0.52	1.2



# SDC & STEP SERIES

## DC-DC Non-Isolated Converters



SDC-23



STEP 7

STEP 20

### Step-Down and Step-Up Converters Features

- Advanced switch mode design
- Compact and light weight
- High efficiency
- Current limiting circuit
- Over-current, over-voltage, short circuit and reverse polarity protection
- Mount in almost any location

### SDC Series

- Converts 24 VDC to 12 VDC

### STEP Series

- Converts 12 VDC to 24 VDC

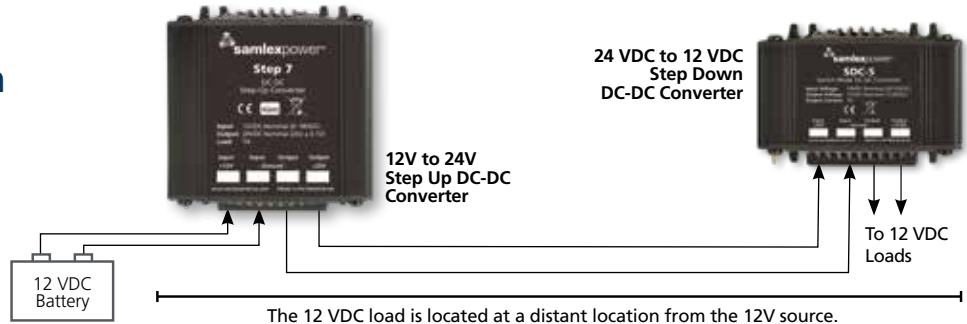


### MODELS

Model No.	Input (VDC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)	Compliance
SDC-5	20-32	13.8	5.0	0.4	3.5 x 2.7 x 1.9	CE
SDC-12	20-32	13.6	12	0.6	3.9 x 3.5 x 1.9	CE
SDC-15	20-35	13.8	12	2.0	7.8 x 4.8 x 2.4	-
SDC-23	20-35	13.8	20	2.2	7.8 x 4.8 x 2.4	-
SDC-30	20-32	13.8	30	1.5	5.9 x 3.5 x 1.9	CE
SDC-60	20-35	13.8	60	2.6	7.0 x 3.5 x 3.6	CE
STEP 7	9 - 18	24.6 - 25.7	7	0.7	3.0 x 3.5 x 2.0	CE
STEP 10	9 - 18	24.6 - 25.7	10	0.9	5.0 x 3.5 x 1.9	CE
STEP 20	9 - 18	24.6 - 25.7	20	1.8	6.0 x 3.7 x 3.6	CE

### Step-Up, Step-Down Application

Requiring Long DC Path For Distributed Networks



# IDC SERIES

## DC-DC Isolated Converters



### Features

- Advanced switch mode design
- Compact and lightweight
- High efficiency
- Current limiting circuit
- Short circuit protected
- ¼" push-on flat pin connectors
- Use with either negative or positive ground systems

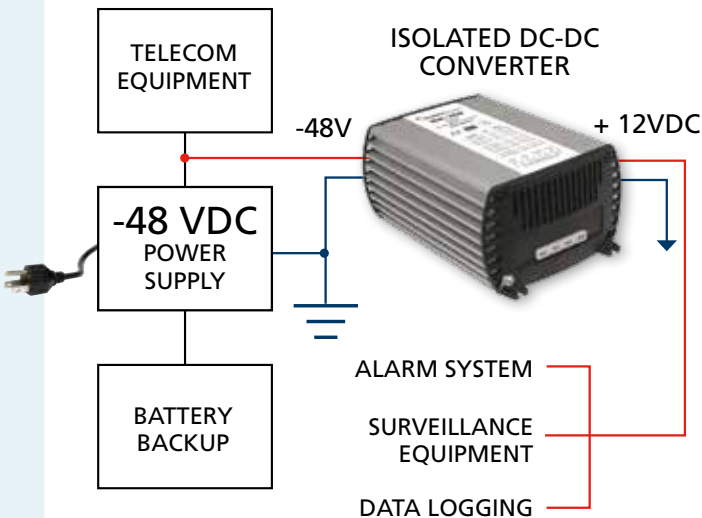
### Applications

- |                        |                     |
|------------------------|---------------------|
| Earth moving equipment | Two-way radio       |
| Heavy trucks           | Lighting systems    |
| Buses                  | AM/FM sound systems |
| Marine                 | Instrumentation     |
| Communications         |                     |

The IDC Series is a complete line of highly efficient DC-DC converters suitable for applications requiring isolation between input and output. 48 VDC output models are available by special order.



### DC-DC Isolated IDC Series Ground Reference Isolation



### MODELS

Model No.	Input (VDC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)
IDC-100A-12	9 - 18	12.5	8	1.2	5.9 x 3.5 x 1.9
IDC-100B-12	20 - 35	12.5	8	1.2	5.9 x 3.5 x 1.9
IDC-100C-12	30 - 60	12.5	8	1.2	5.9 x 3.5 x 1.9
IDC-100D-12	60 - 120	12.5	8	1.2	5.9 x 3.5 x 1.9
IDC-100A-24	9 - 18	24.5	4	1.2	5.9 x 3.5 x 1.9
IDC-100C-24	30 - 60	24.5	4	1.2	5.9 x 3.5 x 1.9
IDC-200A-12	9 - 18	12.5	16	1.4	6.9 x 3.5 x 1.9
IDC-200B-12	20 - 35	12.5	16	1.4	6.9 x 3.5 x 1.9
IDC-200C-12	30 - 60	12.5	16	1.4	6.9 x 3.5 x 1.9
IDC-200D-12	60 - 120	12.5	16	1.4	6.9 x 3.5 x 1.9
IDC-200A-24	9 - 18	24.5	8	1.4	6.9 x 3.5 x 1.9
IDC-200B-24	20 - 35	24.5	8	1.4	6.9 x 3.5 x 1.9
IDC-200C-24	30 - 60	24.5	8	1.4	6.9 x 3.5 x 1.9
IDC-360A-12	9 - 18	12.5	30	3.1	7.5 x 5.2 x 3.2
IDC-360B-12	20 - 35	12.5	30	3.1	7.5 x 5.2 x 3.2
IDC-360C-12	30 - 60	12.5	30	3.1	7.5 x 5.2 x 3.2
IDC-360D-12	60 - 120	12.5	30	3.1	7.5 x 5.2 x 3.2
IDC-360A-24	9 - 18	24.5	15	3.1	7.5 x 5.2 x 3.2
IDC-360B-24	20 - 35	24.5	15	3.1	7.5 x 5.2 x 3.2
IDC-360C-24	30 - 60	24.5	15	3.1	7.5 x 5.2 x 3.2

# SEC SERIES

## Switching Power Supplies



SEC-1235M

Switch mode power supplies are designed for minimal power loss. These highly efficient, light weight and compact power supplies are available in a variety of configurations to meet your DC power requirements.



SEC-PSPP

Simplify your connection to the SEC power supply with the SEC-PSPP cable assembly. Red and black cables neatly terminated and protected with modular connector on one end and SEC power supply pins on the other end.

### Features

- Advanced switch-mode technology
- Reliable power with minimum weight and size
- Circuit innovations minimize output voltage ripple and RFI
- Input voltage can be set internally to 120 VAC or 230 VAC
- SEC-1235M comes with meter

### Applications

- |                             |                          |
|-----------------------------|--------------------------|
| Two-way radio base stations | Automotive displays      |
| Communication systems       | Marine displays          |
| Security systems            | DC Computers             |
| Test equipment              | 12 Volt lighting systems |
| GPS receivers               | OEM applications         |

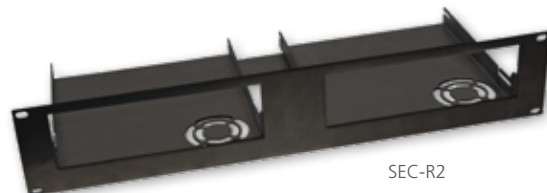


### SEC-R1 & SEC-R2

Rack Mount Assemblies (sold separately) can be used with all Samlex SEC Series power supply models – including the SEC-1223BBM.



SEC-R1



SEC-R2



SEC-R2 with Power Supply and Radio

### MODELS

Model No.	Input (VAC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)	Compliance
SEC-1212	120	13.8	10	3.0	7.3 x 8.2 x 2.3	UL, FCC
SEC-1212CE	230	13.8	10	3.0	7.3 x 8.2 x 2.3	CE
SEC-1223	120	13.8	23	3.5	7.3 x 8.2 x 2.4	UL, FCC
SEC-1223CE	230	13.8	23	3.5	7.3 x 8.2 x 2.4	CE
SEC-1235	120	13.8	30	3.4	7.3 x 8.2 x 2.4	UL, FCC
SEC-1235M	120	13.8	30	3.4	7.3 x 8.4 x 2.4	UL, FCC

### MODELS

Model No.	Description	Weight (lbs)	Dimensions (inches)
SEC-R1	Rack Mount Assemblies	2.4	19 x 3.5 x 7.75
SEC-R2	Rack Mount Assemblies	3.2	19 x 3.5 x 7.75

### MODELS

Model No.	Description	Rating	Weight (lbs)	Length (inches)
SEC-PSPP	Power Supply Modular Connector Cable	45A	0.1	10

# BBM SERIES

## Switching Power Supplies with Battery Backup Circuit



SEC-1223BBM

The SEC-1223BBM combines the reliability of the classic SEC-1223 power supply with the reassurance of the BBM-1225 battery backup module. This combined unit automatically provides uninterrupted DC power from an external backup battery to your critical load in the event of an AC power outage. Once AC power is restored, the SEC-1223BBM will continue to seamlessly supply DC power to the load while providing a current limited charge to the backup battery.

### Features

- Advanced switch-mode technology
- Reliable uninterruptible DC power source in conjunction with external Lead Acid Battery
- Efficient, compact and lightweight
- Units available preset to 120 or 230 VAC
- Protected against short circuit, overload, over voltage and over temperature
- Cooling by temperature controlled fan improves efficiency and prolongs life of the fan

### Applications

- |                             |                          |
|-----------------------------|--------------------------|
| Two-way radio base stations | Automotive displays      |
| Communication systems       | Marine displays          |
| Security systems            | DC Computers             |
| Test equipment              | 12 Volt lighting systems |
| GPS receivers               | OEM applications         |



### Battery Backup Modules

Connect these modules to an AC-DC power supply to provide battery back-up power to your DC equipment in the event of an AC power failure. On return of AC power, the module regulates output current and voltage to recharge the batteries, as well as supply the DC loads.



### MODELS

Model No.	Input (VAC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)	Compliance
SEC-1223BBM	120	13.8	23	3.4	7.3 x 9.5 x 2.4	UL, FCC
SEC-1223BBM-CE	230	13.8	23	3.4	7.3 x 9.5 x 2.4	CE

### MODELS

Model No.	Input Voltage	Output Voltage	Output Current (Amps)	Weight (lbs)	Dimensions (inches)
BBM-1225	≤ 28 VDC	0.5 VDC < input	≤ 25 A	0.7	3.9 x 4.5 x 1.9
BBM-12100	≤ 28 VDC	0.4 VDC < input	≤ 100 A	2.2	5.9 x 7.4 x 2.6



Desktop power supply and radio cabinet combinations are available (see page 26).

# BRM SERIES

## Redundant Switching Power Supplies



SEC-40BRM

### BRM SERIES

19" rackmount power supplies are available with a wide range of input and output voltages. These advanced switch-mode DC power supplies with built-in battery back-up facility produce clean, reliable power and are highly filtered to suppress RFI.

### MPSB MODULES

Open frame SMPS modular power supplies. Used as modules in BRM series or can be used independently. Can be operated in parallel.

### Features: BRM Series

- Modular switch mode power supply
- Provides N + 1 redundancy with modules operating in parallel
- Built in DC UPS function with backup battery charging (requires external battery)
- 25 pin D-sub connector for opto-isolated remote monitoring
- Module status LEDs, fault indicator LEDs and fault alarm are standard features on all models
- Voltage/Ampere meter

### Applications

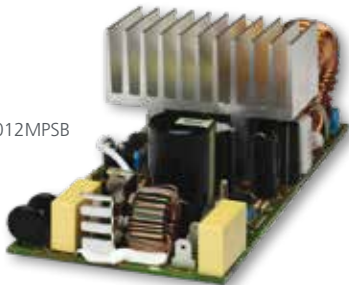
- |                             |                     |
|-----------------------------|---------------------|
| Two-way radio base stations | Automotive displays |
| Communication systems       | Marine displays     |
| Security systems            | DC computers        |
| Test equipment              | Lighting systems    |
| GPS receivers               | OEM applications    |

## N + 1 Redundancy

Active N + 1 redundancy is a form of resilience that ensures system availability in the event of a module failure. Modules (N) should have at least one backup module (+1) fully operational and sharing the load with the other modules.

When sizing the load, the load should not exceed the current supplied by N; leaving the +1 module as redundancy.

SEC-2012MPSB



### MODELS

Model No.	Input (VAC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)
SEC-40BRM-230	230	13.8	40	20.5	19 x 15.9 x 3.6
SEC-100BRM-230	230	13.8	100	25.0	19 x 15.9 x 3.6

### MODELS

Model No.	Input (VAC)	Output (VDC)	Amps (A)	Specific to
SEC-2012MPSB-230	230	14.2	20	SEC-40, 100BRM-230

# SEC P SERIES

## Switching Power Supplies



SEC-1223P

The new technologically advanced SEC P series desktop power supplies are lighter, quieter, power factor corrected, and have a universal AC input. These premium, high efficiency power supplies are cULus listed and CE certified to the newly released IEC 62368-1 safety standard for use all over the globe.



EFFICIENCY LEVEL (VI)<sub>115 VAC</sub>  
EFFICIENCY LEVEL (VI)<sub>230 VAC</sub>

### Features

- Universal Input: 100 to 240 VAC, 50/60 Hz
- Power Factor Corrected
- Complies with Minimum Energy Performance Standard (MEPS) for external power supplies
- Efficiency Level 6 (VI)
- Advanced switch-mode technology
- Reliable power with minimum weight and size
- Circuit innovations minimize output voltage ripple and RFI

### Applications

- |                             |                          |
|-----------------------------|--------------------------|
| Two-way radio base stations | Automotive displays      |
| Communication systems       | Marine displays          |
| Security systems            | DC Computers             |
| Test equipment              | 12 Volt lighting systems |
| GPS receivers               | OEM applications         |



### MODELS

Model No.	Input (VAC)	Output (VDC)	Amps (A)	Weight (lbs)	Dimensions (inches)
SEC-1212P	100-240	13.8	11	3.0	7.3 x 8.2 x 2.3
SEC-1223P	100-240	13.8	23	3.4	7.3 x 8.2 x 2.3
SEC-1235P	100-240	13.8	30	3.7	7.3 x 8.2 x 2.3
SEC-1235P-M	100-240	13.8	30	3.7	7.3 x 8.2 x 2.4



SEC-1235P-M

The SEC-1235P-M sports the newly designed backlit dual integrated analog meters.



# BASE STATION COMBINATIONS

## Cabinets & Power Supplies

	Cabinet Only	Cabinet & SEC-1212	Cabinet & SEC-1223
<b>Harris (M/A Com) Radio Models</b>			
M7300, M5300, XG-75M	12400-H	–	SEC-1223-M7300
M7100	12170-H	–	SEC-1223-M7100
HDM150	12440-H	–	SEC-1223-HYT
XG-25M, XG-75M, XG-100M, M7300, M5300	12480-H	–	SEC-1223-XG
<b>Hytera Radio Models</b>			
MD78X Series	12440-H	–	SEC-1223-HYT
MD61X	12490-H	–	SEC-1223-HYT1
HM78X	12492-H	–	SEC-1223-HYT2
<b>Icom Radio Models</b>			
IC-A110, IC-F1010/F2010, IC-F1610/F2610	12110-I	SEC-1212-IC1	SEC-1223-IC1
IC-F310, 320, 410, 420, 510, 520, 610, 620	12120-I	SEC-1212-IC2	SEC-1223-IC2
IC-F110S/F210S, IC-F110/F210, IC-F121S/F221S, IC-F121/F221, F5121, F6121, F5011, F6011, F6021, IC-2820H, ID-880H-05	12200-I	SEC-1212-IC3	SEC-1223-IC3
IC-F5061/IC-F6061, IC-F5063/IC-F6063, A120	12333-I	–	SEC-1223-IC4
IC-F5400D/F6400D/7500	12540-I	–	–
<b>Kenwood Radio Models</b>			
TK-880 TK-760(G), TK-760H, TK-762G, TK-840, TK-860G, TK-862G, TK-780, TK-840, TK-940, TK-980, TK-981, TK-863G	12090-K	SEC-1212-TK2	SEC-1223-TK2
TK-6110	12270-K	–	SEC-1223-TK4
NX-3720, NX-3820, NX-5700, NX-5800, NX-5900, TK-730, TK-5830, TK-5930, TK-7160H, TK-8160H, VM5000	12450-K	–	SEC-1223-NX
TK-7160, TK-8160	12250-K	SEC-1212-TK3	SEC-1223-TK3
TK-7102, TK-7180, TK-8180, TK-7360, TK-8360, TK-7302, TK-8302, NX-700, NX-800, NX-740, NX-840, NX-720, NX-820, NX-920, NX-900, NX-901, TK-D740, TK-D840, TM-281A, TK-8102 (these models also fit with 12450-K)			
<b>Motorola Radio Models</b>			
SM50, SM120, M1225, GTX, CM200, CM300, CM200D, CM300D, PM400, XPR2500, DM1600	12060-M	SEC-1212-SM	SEC-1223-SM
CDM750, CDM1250, CDM1550	12220-M	SEC-1212-CDM	SEC-1223-CDM
MOTOTRBO XPR4550, XPR4350, XPR4380, XPR6150, DGM6100	12337-M	SEC-1212-MOTOTRBO	SEC-1223-MOTOTRBO
MOTOTRBO XPR5000 Series, DGM 5000, 5500, 8000, 8500, DM4000	12430-M	SEC-1212-MT-XPR5000	SEC-1223-MT-XPR5000
XTL 1500, XTL 2500 Mid Power, XTL 5000 Mid Power, APX 6500/7500/8500 with 05 Control Head Mid Power	12345-M	SEC-1212-XTL-MID	SEC-1223-XTL-MID
<b>Tait Radio Models</b>			
TM 9300, TM 9400	12491-T	–	SEC-1223-TM
<b>Vertex Radio Models</b>			
VX2000, VX2500, VX3000, VX3200	12070-V	SEC-1212-VX	SEC-1223-VX
VX4000, VX5000, VX5500/6000 Low Band	12210-V	SEC-1212-VX2	SEC-1223-VX2
VX4100/4200 Series	12260-V	SEC-1212-VX3	SEC-1223-VX3
VX2200, VX2100, EVX-5300/5400, VX4500, VX4600	12280-V	SEC-1212-VX4	SEC-1223-VX4
VXD7200	12337-M	SEC-1212-MOTOTRBO	SEC-1223-MOTOTRBO
<b>Yaesu Radio Models</b>			
FT-2900	12333-I	–	–

**NOTE:** Radios not included. If your desired radio is not listed, contact Samlex.



#### Head Office

Samlex America Inc.  
103 - 4268 Lozells Ave.  
Burnaby, BC V5A 0C6  
Canada



**Phone:** 1-800-561-5885 | 604-525-3836  
**Fax:** 1-888-814-5210 | 604-525-5221

#### USA Stocking Warehouses

Kent, WA  
Plymouth, MI

#### Canadian Stocking Warehouse

Richmond, BC

**Sales:** [sales@samlexamerica.com](mailto:sales@samlexamerica.com)

**Purchase orders:** [orders@samlexamerica.com](mailto:orders@samlexamerica.com)

**Technical Support:** [tech@samlexamerica.com](mailto:tech@samlexamerica.com)

**Warranty:** [warranty@samlexamerica.com](mailto:warranty@samlexamerica.com)



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