

## Automatic Switch Mode Battery Charger

Model  
SEC-2425UL  
25 Amps  
24 VDC

### Design Features

- Switch mode technology for high efficiency, lightweight and quiet operation
- Automatic operation for ALL Lead Acid Batteries Flooded, AGM or Gel Cell
- Can charge 2 banks of batteries simultaneously, no isolator necessary
- Can be used as a power supply or DC UPS when used in conjunction with a battery
- User Configurable AC Input voltage 120 or 230 VAC, 50 / 60 Hz
- User Selectable ( by DIP Switch) for 2 or 3 stage, rapid and safe charging of stand-alone and loaded Lead Acid Batteries
- "Half Power Mode" reduces maximum charging current to half the rated capacity, allows for safe charging of lower capacity batteries
- Voltmeter and Ammeter for monitoring
- Fan cooled based on output current
- Protections: Short circuit, overload, reverse battery connection and over temperature
- Optional remote LED panel with 33' cable (model: 900-RC) for remote on/off control and indication of charging status
- Includes temperature sensor to prevent under/overcharging of battery if temperature varies extensively



**2 YEAR LIMITED WARRANTY**

MODEL NO.		SEC-2425UL
INPUT	NOMINAL INPUT VOLTAGE AND FREQUENCY	120 VAC, 50 / 60 Hz (Default) ; 230 VAC, 50 / 60Hz (Internal jumper setting)
	AC INPUT CURRENT	(i) At 120 VAC: 10.1A, (ii) At 230 VAC: 5.5A
	AC INPUT CONNECTION	Attached Power Cord: 6 ft length ; 3 x AWG#16 wire size ; NEMA5-15P Plug
OUTPUT	CHARGING CURRENT	25A (Full Power Bulk Stage Current) ; 12.5A (Half Power Bulk Stage Current)
	CHARGING STAGES	3 Stages (DIP Switch setting - Default): Bulk, Absorption and Float 2 Stages (DIP Switch setting): Bulk and Float
	CHARGING VOLTAGES	Bulk Stage: 27.0 VDC Absorption: 28.8 VDC (Default) ; 28.0 VDC (DIP Switch setting) ; Disable (DIP Switch setting)
	NO. OF CHARGING BANKS	2
	OUTPUT CONNECTIONS	Tubular Hole with Set Screw ; Hole Diameter: 7.9 mm ; 5/16 in ; Set Screw Size 5/16" x 24 TPI
MONITORING	LED DISPLAY	Green LED: Half Power Mode is selected
	ANALOGUE METER	Ammeter: 0 to 30A ; Voltmeter: 0-30 VDC
COOLING	TEMPERATURE / LOAD CONTROLLED FAN	Switch on when charging current rises to 6A ± 1A; Switch off when charging current drops to 3A ± 0.5A ; Switch on when Power Transformer temperature rises to 105 ± 5°C / 221 ± 9°F
PROTECTIONS	OUTPUT SHORT CIRCUIT	No output voltage. Manual reset.
	INPUT OVERLOAD	12A input side fuse will blow ( <i>120 VAC input</i> )
	OUTPUT OVERLOAD	Electronic current limit at 25A (Full Power Mode) / 12.5±1A (Half Power Mode)
	REVERSE POLARITY ON OUTPUT SIDE	2 x 20A output side fuses will blow
FUSES	OVER TEMPERATURE SHUTDOWN	Power Transformer temperature rises to 105°C ±5°C / 221°F ±9°F. Manual reset.
	INTERNAL AC INPUT SIDE FUSE (120 VAC OPERATION)	12A, 250V; Size 6.3mm x 32mm; Time Delay Type Mfr.: Littelfuse 0218008 or equivalent
	INTERNAL DC OUTPUT SIDE FUSE	40A [2 x (32V, 20A) in parallel]; Automotive Blade Type; Fast Acting Mfr.: Littelfuse 0287030 or equivalent
ENVIRONMENT	OPERATING TEMPERATURE RANGE	-20°C to +40°C / -4°F to +104°F
	STORAGE TEMPERATURE	-30°C to +70°C / -22°F to +158°F
	RELATIVE HUMIDITY	Up to 90%, non condensing
	OPERATING CONDITIONS	Indoor, ventilated, cool and dust free
COMPLIANCE	SAFETY	Intertek-ETL Listed as follows: • Conforms to UL STD. 1564 • Certified to CSA STD. C22.2 No. 107.2
	EMI	FCC Part 15(B), Class B
DIMENSIONS	L x W x H	331 x 244 x 97 mm / 13.03 x 9.61 x 3.82 in
	WEIGHT	4.1 kg / 9.0 lbs

NOTES: 1. Charging voltage specifications are based on battery temperature of 25°C / 77°F  
2. Specifications are subject to change without notice

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