

## Automatic Switch Mode Battery Charger

Model  
SEC-1280UL  
80 Amps  
12 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 10m of wire (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-1280UL   |
|-------------|---|--|
| 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: 15.9A, (ii) At 230 VAC: 8.6A   |
|             | AC INPUT CONNECTION                             | Attached Power Cord: 6 ft length ; 3 x AWG#12 wire size ; NEMA5-20P Plug   |
| OUTPUT      | CHARGING CURRENT                                | 80A (Full Power Bulk Stage Current) ; 40A (Half Power Bulk Stage Current)  |
|             | CHARGING STAGES                                 | 3 Stages (DIP Switch setting - Default): Bulk, Absorption and Float<br>2 Stages (DIP Switch setting): Bulk and Float   |
|             | CHARGING VOLTAGES                               | Bulk Stage: 13.5 VDC<br>Absorption: 14.4 VDC (Default) ; 14.0 VDC (DIP Switch setting) ;<br>Disable (DIP Switch setting)   |
|             | NO. OF CHARGING BANKS                           | 2  |
| MONITORING  | LED DISPLAY                                     | Green LED: Half Power Mode is selected   |
|             | ANALOGUE METER                                  | Ammeter: 0 to 50A ; Voltmeter: 0-15 VDC  |
| COOLING     | TEMPERATURE / LOAD CONTROLLED FAN               | Switch on when charging current rises to 15A ± 1A; Switch off when charging current drops to 8A ± 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                                  | 20A input side fuse will blow ( <i>120 VAC input</i> )   |
|             | OUTPUT OVERLOAD                                 | Electronic current limit at 80A ( <i>Full Power Mode</i> ) / 40±1A ( <i>Half Power Mode</i> )  |
|             | REVERSE POLARITY ON OUTPUT SIDE                 | 3 x 30A output side fuses will blow  |
| FUSES       | INTERNAL AC INPUT SIDE FUSE (120 VAC OPERATION) | 20A, 250V; Size 6.3mm x 32mm; Time Delay Type<br>Mfr.: Littelfuse 0325020 or equivalent  |
|             | INTERNAL AC INPUT SIDE FUSE (230 VAC OPERATION) | 20A, 250V; Size 6.3mm x 32mm; Time Delay Type<br>Mfr.: Littelfuse 0325020 or equivalent  |
|             | INTERNAL DC OUTPUT SIDE FUSE                    | 90A [3 x (32V, 30A) in parallel]; Automotive Blade Type; Fast Acting<br>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:<br>• Conforms to UL STD. 1564<br>• 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

12001-SEC-1280UL-0920