# OLS20220
## Off-Line Power Supply/Charger

# Installation Guide

## Overview:

Altronix OLS20220 power supply/charger converts 220VAC 50/60Hz input into a 12VDC @ 1A or 24VDC @ 0.5A of continuous supply current (refer to specifications). This general purpose power supply has a wide range of application for access control and security system accessories that require additional power.

## Specifications:

**Input:**
- 220VAC (working range 198VAC-256VAC), 50/60Hz, 0.25A.

**Output:**
- 12VDC or 24VDC selectable operation.
- 0.5A continuous supply current @ 24VDC* 1A continuous supply current @ 12VDC*.
- Filtered and electronically regulated outputs.
- Short circuit and thermal overload protection.

**Battery Backup:**
- Maximum charge current 0.3A.

**Battery Backup** (cont'd)**:**
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.

**Additional Features:**
- AC input and DC output LED indicators.
- Operating temperature: -20ºC to 50ºC.
- Includes battery leads.

**Board Dimensions** (W x L x H approx.)**:**
3" x 2.5" x 1" (76.2mm x 63.5mm x 25.4mm).

* Specified at 25˚C ambient.

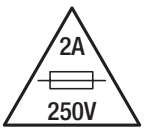
## Voltage Output Selection Table:

| Output VDC | Switch Position | Max. Load DC |
|---|---|---|
| 12VDC | SW 1 - ON | 1.2A |
| 24VDC | SW1 - OFF | 0.5A |

## Installation Instructions:

OLS20220 should be installed in accordance with the National Electrical Code and all applicable Local Regulations.

1. Mount the OLS20220 in the desired location/enclosure (mounting hardware included).
2. Set the OLS20220 to the desired DC output voltage via SW1 *(refer to Voltage Output Selection Table)*.
3. Connect AC power to connector #1 *(Fig. 1)* (black & white flying leads) and ground (green flying lead)
   Use 18 AWG or larger for all power connections (Battery, AC input).
   **Keep power-limited wiring separate from non power-limited wiring (220VAC 50/60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.**
   **CAUTION: Do not touch exposed metal parts.**
   **Shut branch circuit power before installing or servicing equipment.**
   **There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.**
4. Measure output voltage before connecting devices. This helps avoiding potential damage.
5. Connect devices to be powered to the terminals marked [– DC +] *(Fig. 1)*.
6. When the use of stand-by batteries is desired, they must be lead acid or gel type.
   Connect battery to the terminals marked [– BAT +] *(Fig. 1)*.
   Use two (2) 12VDC batteries connected in series for 24VDC operation.
   **Note:** When batteries are not used, a loss of AC will result in the loss of output voltage.




**For continuous protection against fire replace fuse with the same type and rating 5mm - 20mm, 250V, 2A.**

## LED Diagnostics:

| Red (DC) | Green (AC) | Power Supply Status |
|---|---|---|
| ON | ON | Normal operating condition. |
| ON | OFF | Loss of AC. Stand-by battery is supplying power. |
| OFF | ON | No DC output. Short circuit or thermal overload condition. |
| OFF | OFF | Loss of AC. Discharged or no stand-by battery. No DC output. |

## Terminal Identification:

| Terminal Legend | Function/Description |
|---|---|
| L, G, N | Connect 220VAC to these terminals: Black to Hot, White to Neutral, Green to ground. |
| – DC + | 12VDC @ 1.0A continuous supply current. 24VDC @ 0.5A continuous supply current. |
| – BAT + | Stand-by battery connections. Maximum charge rate 0.3A. |

*Fig. 1*