

## OLS20 Off-Line Power Supply/Charger

# **Installation Guide**

### **Overview:**

Altronix OLS20 power supply/charger converts 115VAC 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:

• Input 115VAC 50/60Hz, 0.5A.

#### 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:**

• Built-in charger for sealed lead acid or gel type batteries.

#### Battery Backup (cont'd):

- Maximum charge current 0.3A.
- Automatic switch over to stand-by battery when AC fails.

#### **Additional Features:**

- AC input and DC output LED indicators.
- Operating temperature: 20°C to 50°C.
- 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:

OLS20 should be installed in accordance with the National Electrical Code and all applicable Local Regulations.

- 1. Mount the OLS20 in the desired location/enclosure (mounting hardware included).
- 2. Set the OLS20 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 (115VAC 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.

250V

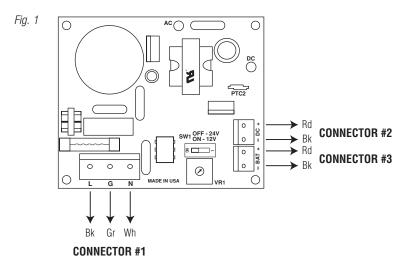
For continuous protection against fire replace fuse with the same type and rating 5mm - 20mm, 250V, 2A.

## **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 115VAC 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.



Altronix is not responsible for any typographical errors.

