

1. Description

The AL-3510 is a full range power supply.

2. Specifications

2.1. General

- Operation temperature: 0 a 60°C
based on IEC 1131
- Stocking temperature: -25 a 60°C
- Operation humidity: 5 a 95% without condensation
based on IEC 1131 level RH2
- MTBF: 40.000 @ 40°C
based on MIL-HBDF-217E
- Output tension LED indication
- Normally open dry contact indicating operation of the power source, available at the OK0, OK1 and the GND connector
- Battery self testing, indication by LED on frontal
- Mechanical protection: IP30, finger access
based on IEC Pub. 144(1963)
- Weight:
net: 1500 g
packed: 2000 g

2.2. Electrical

- Power supply:
93,5 to 253 VAC
or
90 to 250 VDC
or
20 to 60 VDC
- Power frequency:
47 a 63 Hz
- Output tensions:
+5 VDC $\pm 5\%$
+15 VDC $\pm 10\%$
-15 VDC $\pm 10\%$
- Inrush current:
25 A for half cycle
- Maximum input power:
140 VA
- Power factor:
0,75 on nominal load
- Output currents:
+5 VDC: 8,0 A
+15 VDC: 1,0 A
-15 VDC: 1,0 A
- Efficiency:
70%
- Output ripple:
+5 VDC: 50 mVpp
+15 VDC: 100 mVpp
-15 VDC: 100 mVpp
- Noise:
+5 VDC: 100 mVpp
+15 VDC: 150 mVpp
-15 VDC: 150 mVpp
- Load and bus regulation
+5V: 5%
+15V: 10%
-15V: 10%
- Maximum output power:
70 W
- Full load operation for 10ms without power supply
- Protections:

- over and under tension on power supply
- output short circuit
- output over tension

- Battery:
 - lithium 1 AA - 3V
 - capacity: 1,4 Ah @ 25°C
 - self load discharge: 5 years @ 25°C
 - life: 14.000 hours @ 25°C
- Electrostatic Surge Discharge:
based on IEC 1131, level 4
- Electrical noise immunity (oscillating wave):
based on IEC-1131 level A and IEC 3790.1 part A (SWC)
- Dielectric withstand voltage:
 - 2500 VDC between Input and Outputs
 - 1500 VAC rms between Inputs and Outputs
based on IEC 1131 and IEC 255-5
- Irradiated electrical field immunity:
10V/m @ 140 MHz
based on IEC-1131
- Protection against electrical shock:
based on IEC 1131 and IEC-536-1976, class I
- Resistive switching capacity of relay indication of functionality:
 - 1 A @ 30 Vdc
 - 0,28 A @ 110 Vdc
 - 1 A @ 62,5 Vac
 - 0,5 A @ 125 Vac

3. Physical Dimensions

