

### FEATURES

- 50W switching power supply
- 85VAC - 264VAC continuous input
- Input frequency: 47Hz to 63Hz
- Fused input line
- Triple output voltage:
  - +5 VDC @ 5A
  - +12 VDC @ 2A
  - 12 VDC @ 0.5A
- Short circuit protection on outputs
- Overvoltage protection on +5V
- Momentary push button reset switch

The PS-50W-1 is a 50 Watt universal input switching power supply for use with WinSystems' embedded single board computers. It can be used both during initial prototyping and development or in the final application environment. There is enough current capacity to allow it to power hard and floppy disks drives for DOS based applications. The wide input voltage range allows its use internationally.

### FUNCTIONAL CAPABILITY

**50 Watt Power Supply** - The PS-50W-1 uses a triple output, 50 Watt power supply. It accepts 85VAC to 264VAC, 47Hz - 63Hz single phase. Although the unit is shipped with a standard 4 foot AC power cord for the US and Canada, it is a universal input switching design. Universal input voltage eliminates the need for an external 115/220 VAC system switch thereby eliminating failures due to improper input voltage.

A lighted dual pole, single throw ON/OFF switch is on the front panel. Next to that switch is a push button system RESET switch. An in-line fuse is wired on the input side of the power supply for extra protection.

**Output Loading and Protection** - The PS50 is a zero current switcher. It will maintain regulation on +5 volts down to zero current thus eliminating the need for load resistors at light loads. Although it will operate with no load on the outputs, some component temperatures increase under this condition with a recommended minimum load of 400 mA on the +5 volt line.

The PS50 has overvoltage protection and output short circuit protection. Recovery after fault is automatic.



Operating temperature using convection cooling is from 0°C to +50°C with no derating. Its capacity is derated to 25W at 70°C. Forced air cooling will extend the operational temperature range.

**Mounting** - The PS-50W-1 is mounted in an enclosed case and can operate on a desk or be mounted on a flat surface using the flanges on the case. The unit is 7.5" x 5.575" x 2.46" and weighs 30 ounces (851 grams).

**Connectors** - The CBL-205-1 is plugged into the back of the supply and has 4 power connectors that will plug directly into WinSystems' SAT and LBC series of embedded single board computers as well as standard floppy and hard disk drives.

### SPECIFICATIONS

#### Electrical

Input Voltage: 85VAC to 264VAC continuous  
47 - 63 Hz, single phase  
Output Voltage: +5VDC  $\pm 2.5\%$  @ 5A  
+12VDC  $\pm 5\%$  @ 2A  
-12VDC  $\pm 5\%$  @ 0.5A

#### Mechanical

Dimensions: 7.5" (D) x 5.575" (W) x 2.46" (H)  
Weight: 30 oz. (851 grams)

#### Environmental

Operational Temperature: 0° to +50°C

### ORDERING INFORMATION

PS-50W-1	50W switching power supply
CBL-205-1	DC harness

