

# SPN50 Series

## 50 WATT, Universal Input Fully Enclosed Switching Power Supply



### FEATURES

- ✔ **50 WATT OUTPUT POWER**
- ✔ **UNIVERSAL INPUT**
- ✔ **OVERVOLTAGE PROTECTION**
- ✔ **OVERCURRENT PROTECTION**
- ✔ **LIGHTWEIGHT CONSTRUCTION**
- ✔ **METAL CHASSIS WITH COVER**
- ✔ **COMPACT, LOW-PROFILE PACKAGES**
- ✔ **3 YEAR WARRANTY**

### SAFETIES/APPROVALS

FCC-B  
EN 55022-B  
VCCI-II

### ELECTRICAL SPECIFICATIONS

All specifications are typical at nominal input, full load

### INPUT SPECIFICATIONS

Input Voltage.....	85 ~ 264VAC
Input Frequency.....	47 ~ 63Hz
Input Current.....	0.55 ~ 1.0A Typ.
Inrush Current.....	16A ~ 39A Typ

### OUTPUT SPECIFICATIONS

Output Voltage .....	See Chart
Voltage Adjustment.....	±10%
Minimum Load.....	±10%
Efficiency.....	75 ~ 80%
Over-Voltage Protection.....	115 ~ 150% Manual Reset
Over-Current Protection.....	Automatic Recovery (105% min)
Ripple and Noise.....	100mVp-p max.
Hold-Up Time.....	40 ~ 50 mS
Line/Load Regulation.....	See Chart
Rise Time.....	800 ~ 1700 mS
Leakage Current (100/230VAC).....	0.75mA

### GENERAL SPECIFICATIONS

MTBF.....	>160,000 Hours
Isolation Voltage	
Primary to Secondary.....	3000VAC
Primary to Case.....	1500VAC
Secondary to Case.....	500VAC
Isolation Resistance.....	100 M-Ohms min.

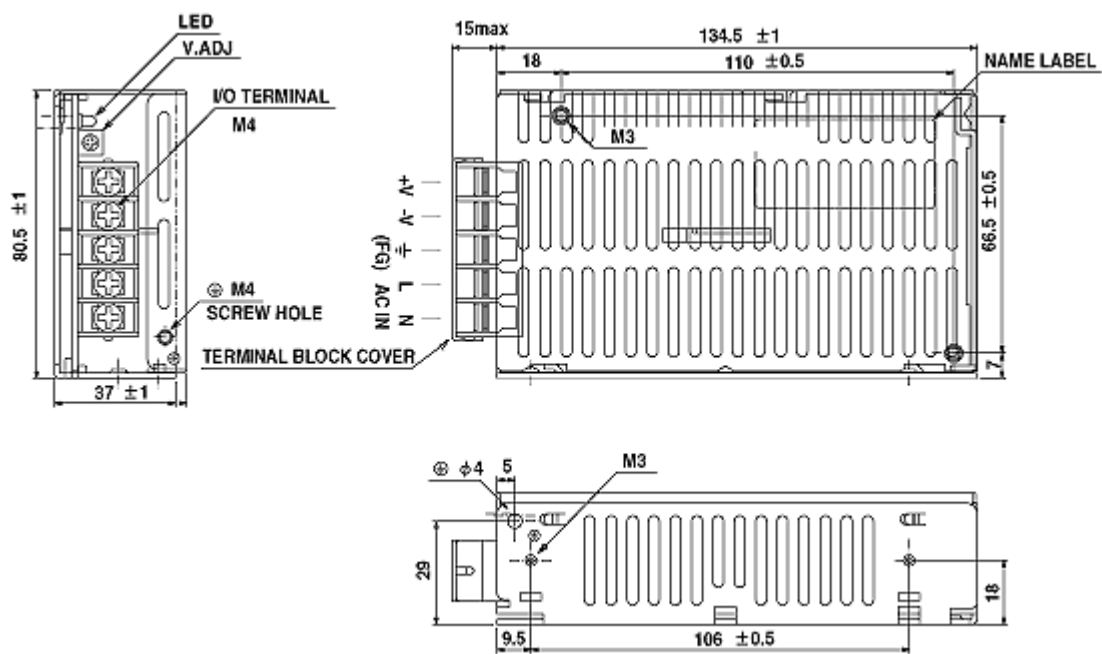
### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....	0°C ~ +60°C
Cooling.....	Convection
Temperature Coefficient.....	0.02% / °C
Humidity.....	20 ~ 85%Rh (non-condensing)
Storage Temperature.....	-20°C ~ +85°C
Shock Vibration.....	Shock: 20G(3 Directions each 3 times) Vibration: 10 ~ 55Hz

### PHYSICAL SPECIFICATIONS

Metal Enclosed – Terminal Block

MODEL	Output Voltage	Output Current (85 ~ 264 VAC)	Efficiency (%)	Load Regulation (mV max)
SPN50-05S	5VDC	10A	75%	10mV max
SPN50-12S	12VDC	4.2A	78%	10mV max
SPN50-15S	15VDC	3.4A	79%	10mV max
SPN50-24S	24VDC	2.1A	80%	20mV max
SPN50-48S	48VDC	1.1A	80%	40mV max



Note:

- Mounting screws not to exceed max penetration of 6mm
- Screw thread size is M3 (Metric) or 6/32<sup>nd</sup> (Inch)
- Weight 200g typ.
- Measurements in millimeter (mm) unless otherwise specified
- Tolerance  $\pm 1$ mm

**NOTE:**

All specifications typical and nominal / full load and 25°C unless otherwise noted.  
 Avoid sustained operation in overload or dead short conditions.  
 Specifications subject to changes without notice.