

### ALS30-5

#### Description:

The ALS30-5 is a single output power supply. This power supply is designed for a wide range of applications. It provides a DC output power in a cost-effective open frame package. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class A), and Low Voltage directive (TUV EN60950).

#### Specifications (@25C)

##### Input Characteristics:

Input Voltage (5):	110/220Vac (90-260Vac, 120-370Vdc)
Input Frequency Range (1):	47-63Hz
Max Input Current:	0.9A @ 110Vac; 0.45A @ 220Vac
Max Inrush Current:	30A @ 220Vac
Hold-Up Time:	15/30ms typ @ 110/220Vac, 100% Load

##### Output Characteristics:

Output Voltage:	5Vdc
Output Current (1):	6.0A
Output Current Peak (6):	8.0A
Output Power:	30W
Total Peak Output Power (6):	40W
Ripple & Noise (20MHz BW):	50mV
Line Regulation (4):	1.0%
Load Regulation (3):	2.0%
Temperature Drift:	<1% from min to max ambient Temp
Rise-up Time:	600/300ms max, 110Vac/220Vac 100% Load
Over Current Protection:	At Load > 120%
Over Voltage Protection:	At Vout > 105% CH1 only
Short Circuit Protection:	Unit under low power mode, auto recovery upon removal of short.
Adj. O/P Voltage Range (1,2):	±10%

##### Environmental Specifications:

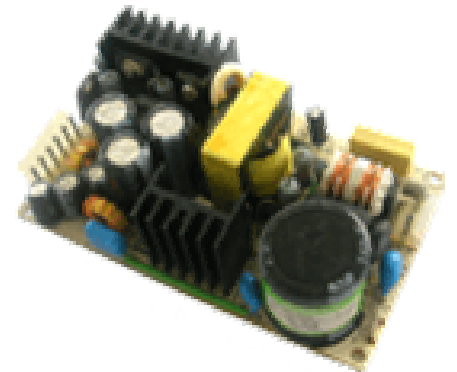
EMI (Conducted):	Built to meet FCC Class A, VCCI class I
EMI (Radiated RFI):	Built to meet FCC Class A
Operating Temperature:	0 to 50°C@100% Load; 60°C@70% Load
Operating Humidity:	20 to 90% RH
Storage Temperature:	-25 to 75°C
Storage Humidity:	10 to 95% RH
Cooling:	Convection cooling
Vibration:	1min sweep 0 to 55Hz, 2G Amplitude, X, Y, Z axis 1hr each
Shock:	<20G

##### General Specifications:

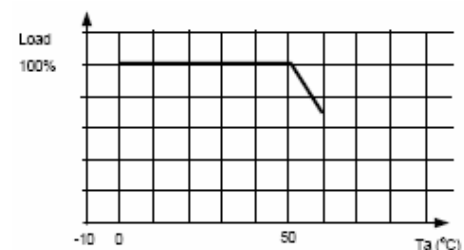
Efficiency:	75% Typical
Dimensions (WxLxH):	35.6x64.0x108.0mm
Weight:	200g
Warranty:	2 years @ 40°C, 100% Load

##### Safety Standards:

Standards:	UL1950 (E204980) TUV EN60950 (5007024) Built to meet CSA 22.2
Dielectric Strength:	Input-Output=3kV, 1min; In-FG= 2.0kV, 1min
Insulation Resistance:	Output-FG:>100Mohm, 500Vdc



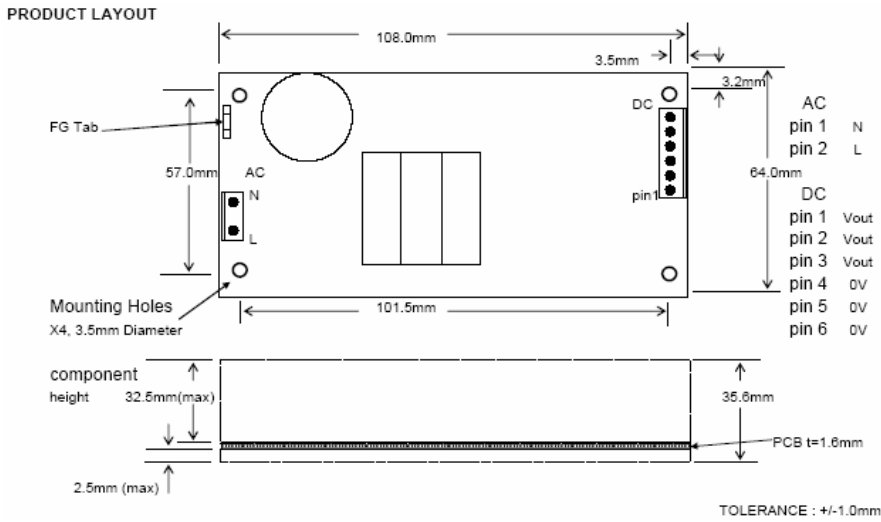
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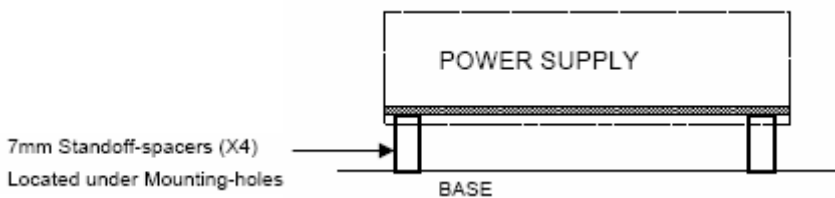
### Technical Notes:

1. Throughout  $V_{in}$  range.  $V_{out}$  must be measured as near as possible to power supply.
2. Throughout  $I_o$  range  $I_o(\min)$ - $I_o(\text{rated})$ , ( $I_o$  = output current).
3.  $V_{out}$  deviation as  $I_o$  varies from  $I_o(\min)$ - $I_o(\text{rated})$
4.  $V_{out}$  deviation as  $V_{in}$  varies from 90 – 260Vac.
5. Where UL and CSA is concerned, official rated input voltage range is 100-120Vac/200-240Vac.
6. Peak power operating for 30 sec with duty <10%. Line % load regulation may not meet above specs.

### Outline Dimensions (mm):



### Mounting Method:



### Connector Types:

AC Housing: Molex 09-50-3031  
DC Housing: Molex 09-50-3061

Crimp Terminals: Molex 08-50-0105  
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**RoHS Compliance:** This power supply meets the requirements 2002/95/EC, known as the RoHS initiative.

\* Upon printing, this document is considered "uncontrolled". Please contact Triad Magnetics' website for the most current version.