

SPECTRA – i.Net®

PRODUCT SHEET & SPECIFICATIONS

POWER SUPPLY (MODEL G14-P320)



The Spectra i.Net® Sound Masking System uses a 48 Volt DC power supply unit to power the OP.

The power supply is connected to the Spectra i.Net® system's sound source (OP) using 2 conductor, plenum rated 16 gauge wire.

To install the power supply, mount the unit to the wall with angle brackets and screws to fasten. Keep vents exposed.

– FEATURES

- + Universal AC input/full range
- + Built-in active PFC function, PF>0.95
- + Protections – short circuit/over load/over voltage/over temperature
- + Forced air cooling by built-in DC Fan
- + Built-in fan speed control
- + Fixed switching frequency at 100KHz
- + 3 year warranty

POWER SUPPLY

– OUTPUT

- + DC Voltage – 48V
- + Rated Current – 6.7A
- + Current Range – 0 ~ 6.7A
- + Rated Power – 321.6W
- + Ripple & Noise (max.) – 240mVp-p (Note.2)
- + VoltageADJ. Range – 41 ~ 56V
- + Voltage Tolerance – ±1% (Note.3)
- + Line Regulation – ± 0.2%
- + Load Regulation – ± 0.5%
- + Setup, Rise Time – 800ms, 50ms/230VAC
2500ms, 50ms/115VAC at full load
- + Hold Up Time (Typ.) – 16ms/230VAC
16ms/115VAC at full load

– INPUT

- + Voltage Range – 88 ~ 264VAC, 124 ~ 370VDC (Note.5)
- + Frequency Range – 47 ~ 63Hz
- + Power Factor (Typ.) – PF>0.95/230VAC, PF>0.98/115VAC at full load
- + Efficiency (Typ.) – 89%
- + AC Current (Typ.) 115VAC – 5A
- + AC Current (Typ.) 230VAC – 2.5A
- + Inrush Current (Typ.) – 20A/115VAC, 40A/230VAC

– PROTECTION

- + **Overload**
105 ~ 135% rated output power
Protection type – Hiccup mode, recovers automatically after fault condition is removed
- + **Over Voltage**
57.6 ~ 67.2V
Protection type – Shut down o/p voltage, re-power on to recover
- + **Over Temperature**
80°C ± 5°C (70 °C ± 5°C 3.3V 5V only) (TSW1 – detect on heatsink of power transistor)
Protection type – Shut down o/p voltage, recovers automatically after temperature goes down

– SAFETY & EMC (note 4)

- + Safety Standards – UL60950-1, TUV EN60950-1, CCC GB4943 approved
- + Withstand Voltage – I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC
- + Isolation Resistance – I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
- + EMI Conduction & Radiation – Compliance to EN55022 (CISPR22) Class B
- + Harmonic Current – Compliance to EN 61000-3-2,-3
- + EMS Immunity – Compliance to EN 61000-4-2,3,4,5,6,8,11; ENV 50204, EN 55024, light industry level, criteria A

– ENVIRONMENT

- + Working Temp. – -20 ~ +65°C (Refer to output load derating curve)
- + Working Humidity – 20 ~ 90% RH non-condensing
- + Storage Temp. Humidity – -40 ~ +85°C, 10 ~ 95% RH
- + Temp. Coefficient – 0.03%/°C (0 ~ 50°C)
- + Vibration – 10 ~ 500Hz, 2G 10min./1cycle, 60min each along X,Y, Z axes

– DIMENSIONS

- + Dimension – w 8.46" x h 4.53" x d 1.97"
- + Packing – 1.1Kg; 12pcs/14Kg/0.92CUFT

NOTES

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
5. Derating may be needed under low input voltages. Please check the derating curve for more details.

OTHER SYSTEMS ALSO AVAILABLE

Spectra®, CrossNetOne™, CrosswaysOne™