

Input Specification

Nominal Input voltage 24V DC

Input voltage range	18-32V DC. Low Line inhibit, turn on 21V nominal, turn off 18.5V nominal.
Efficiency	Typ 75% @ full load.
EMI-filter standard	BTR 2511
Isolation	Tested at 500V DC: Input to Chassis Input to Output

Output Specification

Max output power	350W	
Overall regulation	Less than 0.5%	
Ripple Pk-Pk (20Mhz bandwidth)	Main o/p: 75mV max. Aux o/p: <1.5% or 75mV whichever is greater.	4
Current limit	All outputs are separately protected. Overall power limit set at approximately 400W output power	5
Short circuit protection	Protected for continuous short circuit.	
Overvoltage protection	120-130% typ. (Recycle input to reset).	
Thermal protection	Outputs disabled when internal temp exceeds safe operating range.	6
Remote sense	As supplied, the main output has local sense links fitted. Do not remove these links unless remote sensing is required (200mV total drop max)	7
Minimum load	Not required.	
Isolation	Tested at 250V DC: Output to Chassis	
<u>General</u>		
Cooling	Forced air cooled (cover mounted fan)	
Operating temp	0°C to 50°C. For 50° to 65°C, de-rate each o/p @ 2.5% per °C	
Weight	4Kg typ.	

CAUTION

- 1. Connect the power supply correctly. Always use correct size and style input connections.
- 2. Install power supply correctly. Use correct screw sizes for mounting. Screws must not penetrate the interior of the supply excessively to avoid shorting internal components.
- 3. Operate the power supply safely. Power supplies generate heat; allow adequate ventilation at the sides for fan intake and exhaust and keep away from combustible materials and gases. Make sure liquid or metal fragments do not enter the supply, as this could constitute a fire hazard.
- This power supply is intended for use as a component part of other equipment. When installing, the relevant safety standards (e.g. IEC950/VDE0805; EN60950; CSA C22.2 no.950 & no. 234; UL1950) must be complied with.
- Maintain power supply safely. Only qualified personnel should service or repair this unit. Beware of possible hazardous internal voltages due to charged capacitors, even after power is disconnected.
- In case of failure, this power supply should be returned to Advance Product Services Ltd to ensure compliance with safety requirements. Interference with the internals of this unit by any other persons may invalidate the warranty.
- 7. The outputs of this product must be earthed in the end use equipment to maintain SELV. Live parts of outputs exceeding 42V should be adequately protected from contact by personnel.

Installation & Application Notes

Signals Information

А

В

С

D

Е F

Function Input fail (active low) Input fail signal (active low) Input fail signal (active high) Outputs up signal (active high) Outputs up signal (active low) Input Failed Remote Shutdown input 0V return Remote Shutdown input +5V Input fail (active high) Note:- All signals are referenced to main output Input Failed 0V. TTL compatible Input Fail signals occur when the input В С D F voltage is removed or drops below 18.5V **Signals Connector** Barrier type terminal strip, Outputs up (active high) 6 off no. 6-32 UNC screws (0.325" centers). All outputs up **DC Input Terminal**

Barrier type terminal strip, 6 off no. 6-32 UNC screws (0.375" centers).

Output Terminal

Barrier type terminal strip, 13 off no. 6-32 UNC screws (0.375" centers).

Output 4 and 5 are fully floating with respect to the remaining outputs. Terminal X is used as the 0V return for outputs 4 and 5.



All outputs up

TTL compatible Outputs Up signals are active when all outputs are >85% of their nominal voltage.



Unit stopped

TTL High can be applied from an external source to provide an inhibit and shutdown signal to the inverter stage. Unit can be restarted by applying TTL low signal or leaving the connection open.

Installation & Application Notes

Electrical Isolation & Insulation

The PIN Series power supply has been tested with the following voltages:

Input to Output	500V DC
Input to Chassis	500V DC
Output to Output	250V DC
Output to Chassis	250V DC

There are capacitors between output common and chassis earth so no high voltages should be applied between the output terminals and chassis earth.

Mechanical Outline



Notes:

- 1. Input: Six off No. 6-32 UNC screws (0.375" centers). Maximum torque: 0.68Nm (6in-lbs).
- 2. Signals connector: Six off No.6-32 UNC screws (0.325" centers). Maximum torque: 0.68Nm (6in-lbs).
- Output Connections: Thirteen off No. 6-32 UNC screws (0.375" centers). Maximum torque: 0.68Nm (6in-lbs).
 All dimensions are in millimetres (inches) and are typical.
- All dimensions are in millimetres (inches) and are typical.
 Customer fixings: Base mounted four M3 fixings provided. Maximum screw penetration of 5mm.
 - Rear mounted four M3 fixings provided. Maximum screw penetration of 5mm.