

- DESKTOP POWER SUPPLIES
- UNIVERSAL INPUT

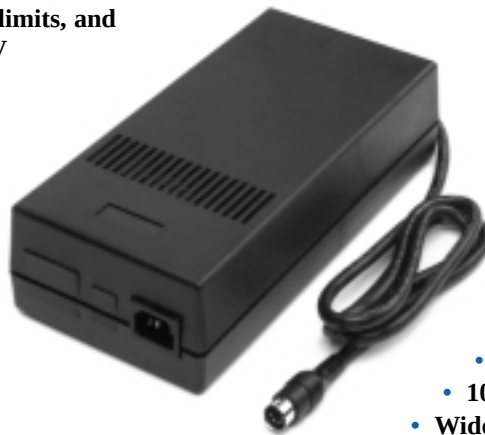
110 WATT

**SWITCHING
POWER SUPPLY**



DESCRIPTION

The PUP110 Series of AC/DC switching power supplies provide 110 watts of continuous output power. They are enclosed in a 94V-0 polycarbonate case with an IEC 320 inlet to allow for world wide use. An on/off switch can be added as an option. All models meet CISPR Class B and FCC Class B emission limits, and are approved to UL, CSA, and TUV (per IEC) requirements.



FEATURES

- Single, dual, triple or quad outputs
- Built-in EMI filter
- Optional output connectors
- Optional on/off switch
- Optional PFD signal
- 100% burn-in
- Wide input voltage 85 to 264 VAC
- Input surge current protection
- Overvoltage protection
- Overcurrent protection

OUTPUT VOLTAGE/CURRENT RATINGS CHART

Model	Output #1				Output #2					Output #3				Output #4				Maximum Output Power
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Ipeak	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
PUP110-10	5V	0A	22A	5%	N/A					N/A				N/A				110W
PUP110-12	12V	0A	9A	4%	N/A					N/A				N/A				110W
PUP110-13	15V	0A	7.5A	3%	N/A					N/A				N/A				110W
PUP110-14	24V	0A	4.5A	3%	N/A					N/A				N/A				110W
PUP110-16	30V	0A	3.6A	3%	N/A					N/A				N/A				110W
PUP110-18	48V	0A	2.3A	3%	N/A					N/A				N/A				110W
PUP110-23	+5V	0A	10A	5%	+12V	0A	5A	9A	5%	N/A				N/A				110W
PUP110-31	+5V	0A	10A	5%	+12V	0A	5A	9A	5%	-12V	0A	1A	5%	N/A				110W
PUP110-32	+5V	0A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	1A	5%	N/A				110W
PUP110-40	+5V	0A	10A	5%	+12V	0A	5A	9A	5%	-12V	0A	1A	5%	-5V	0A	1A	5%	110W
PUP110-41	+5V	0A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	1A	5%	+24V	0A	1A	5%	110W
PUP110-42	+5V	0A	10A	5%	+12V	0A	5A	9A	5%	-12V	0A	1A	5%	+12V	0A	1A	5%	110W
PUP110-45	+5V	0A	10A	5%	+12V	0A	5A	9A	5%	-12V	0A	1A	5%	+24V	0A	1A	5%	110W
PUP110-45-1	+5V	2A	10A	5%	+12V	0A	5A	9A	5%	-12V	0A	1A	5%	+24V	1.5A	3A	10%	110W
PUP110-45-2	+5V	0A	10A	5%	+24V	0A	3A	5A	5%	-12V	0A	1A	5%	+12V	0A	1A	5%	110W
PUP110-46	+5V	0A	10A	5%	+15V	0A	4A	7.5A	5%	-15V	0A	1A	5%	-5V	0A	1A	5%	110W

GENERAL SPECIFICATIONS

All specifications typical at nominal line, full load and 25°C.

Efficiency:	62% minimum at 110W output
Hold-up time:	12 msec minimum
Line regulation:	±0.5% maximum at full load
Inrush current:	15 amps @ 115 VAC, or 30 amps @230 VAC at 25°C cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground 500 VAC from output to ground
Insulation resistance:	10 Mohm minimum from output to ground
Operating temperature:	0 to +70°C. Derate linearly from 100% load at 50°C to 50% load at 70°C
Storage temperature:	-40 to +85°C
Mean time between failure:	100,000 hours minimum at full load at 25°C ambient
EMI requirements:	Meets conduction and radiated limits of: a) FCC 20780 Level B b) CISPR 22 (EN 55022) Level B
Safety requirements:	Meets or exceeds: a) UL 1950 b) CSA C22.2 #234 c) IEC 950

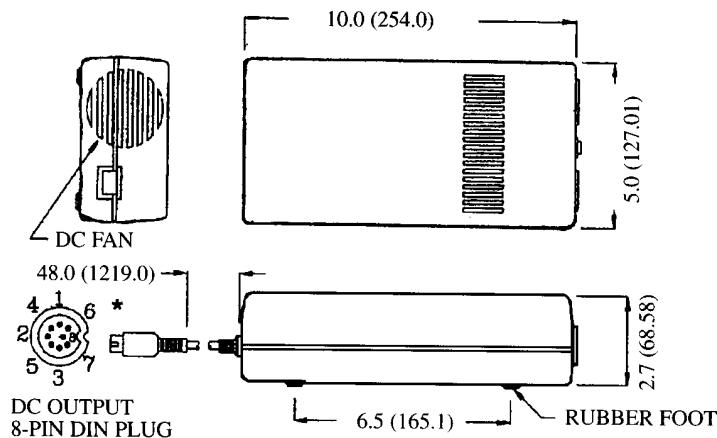
INPUT SPECIFICATIONS

Input voltage:	85 to 264 VAC
Input frequency:	47 to 440 Hz
Input current:	3.20A (rms) for 115 VAC 1.80A (rms) for 230 VAC

OUTPUT SPECIFICATIONS

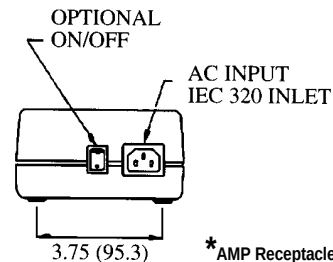
Output voltage/current:	See Rating Chart
Output power range:	0 to 110 Watts
Ripple and noise:	1% peak to peak maximum
Overvoltage protection:	Provided on output #1 only; set at 112-132% of its nominal output voltage
Overcurrent protection:	All outputs protected to short circuit conditions
Temperature coefficient:	All outputs ±0.04%/°C maximum
Power fail detect (optional):	TTL logic high for normal operation and TTL logic low upon loss of input power. This signal appears at least 1 ms prior to +5V output dropping 5% below its nominal value. This signal also provides a minimum delay of 100ms after +5V is within regulation.

MECHANICAL SPECIFICATIONS



NOTE:

1. Dimensions shown in inches (mm)
2. Tolerance 0.02 (0.5) maximum
3. Optional output connectors available
4. Optional ON/OFF switch available
5. Weight: 1.35 kg



* AMP Receptacle No. 212047-1 or Equivalent

PIN CHART

Model	PIN	1	2	3	4	5	6	7	8
PUP110-10 PUP110-13 PUP110-16	PUP110-12 PUP110-14 PUP110-18	RETURN	RETURN	OUTPUT #1	RETURN	OUTPUT #1	RETURN	OUTPUT #1	PFD
PUP110-23		COMMON RETURN	N.C.	OUTPUT #1	N.C.	OUTPUT #2	COMMON RETURN	OUTPUT #1	PFD
PUP110-31 PUP110-32		COMMON RETURN	OUTPUT #3	OUTPUT #1	N.C.	OUTPUT #2	COMMON RETURN	OUTPUT #1	PFD
PUP110-40 PUP110-42 PUP110-45-1 PUP110-46	PUP110-41 PUP110-45 PUP110-45-2	COMMON RETURN	OUTPUT #3	OUTPUT #1	OUTPUT #4	OUTPUT #2	COMMON RETURN	OUTPUT #1	PFD