

GENERAL PURPOSE ■ EXTERNAL

PUP SERIES

FEATURES

- Wide range of models
- Adjustable output voltage
- Single, dual, triple and quad output voltages
- Universal input
- Overcurrent protection
- Overvoltage protection
- UL, CSA, and CE approvals



PRODUCT INFORMATION

The PUP series external power supplies are enclosed in a polycarbonate case with an IEC320 input connector. They have a wide AC input voltage and single to multi output combinations. In most cases the PUP30 and PUP55 series have Energy Authority Approval.

INPUT SPECIFICATIONS

Input Voltage	85–264VAC wide input
Frequency	47Hz–400Hz
Input Current	PUP30: 0.80A @ 115V, 0.5A @ 230V PUP55: 1.5A @ 115V, 0.9A @ 230V PUP110: 3.2A @ 115VAC, 1.8A @ 230VAC
Inrush Current	15A @ 115V, 30A @ 230V

OUTPUT SPECIFICATIONS

Output Voltage	See table
Output Voltage Adjustment	V1 only – see table, ±10% on multi outputs
Output Current	See table
Output Power	PUP30 @ 30W PUP55 @ 55W PUP110 @ 110W
Ripple & Noise	1% peak to peak
Line Regulation	±0.5% over input range
Load Regulation	See table
Transient Response	Max. deviation 4% recovering to 1% within 500µs after 25% load charge
Overvoltage Protection	Provided on V1 only. Set at 110%–132% of nominal
Overcurrent Protection	All outputs protected for short circuit conditions
Temperature Coefficient	All outputs ±0.04% per °C
Holdup Time	Typically 10mS at 110VAC

OPERATING SPECIFICATIONS

MTBF	100,000 hrs @ 25°C
Efficiency	65%–70%
Insulation	Input – Output: 3000VAC Input – Ground: 1500VAC Output – Ground: 500VAC
Insulation Resistance	10MΩ from Output to Ground
PFD Signal	Power fail detection optional on PUP110

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to 50°C
Derating	Derate to 50% at 70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5%–95% non-condensing

STANDARDS AND APPROVALS

Office of Energy	PUP30: N13637; PUP55: N13180
Safety	UL1950, CSA C22.2, EN60950
C-Tick	AS/NZS2064:1997 Group 1 Class A EMC filters supplied with some models

MECHANICAL SPECIFICATIONS

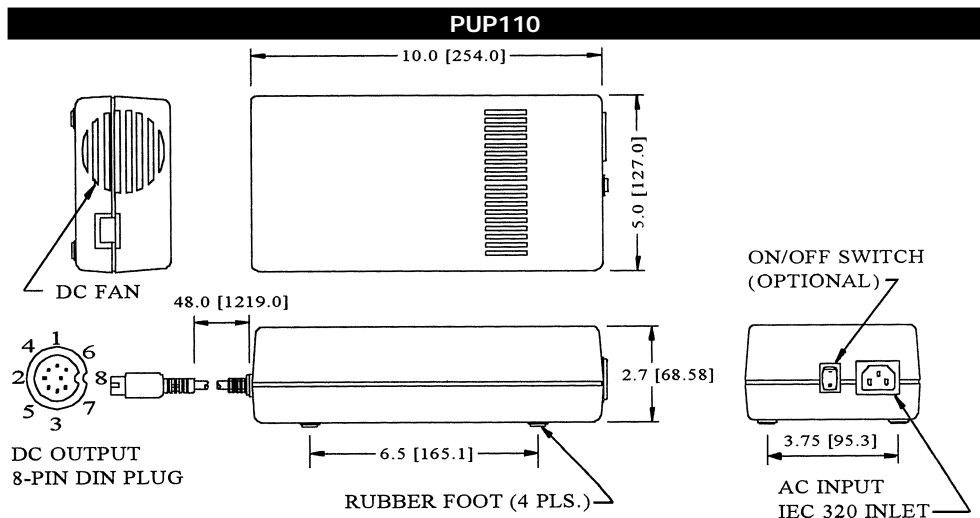
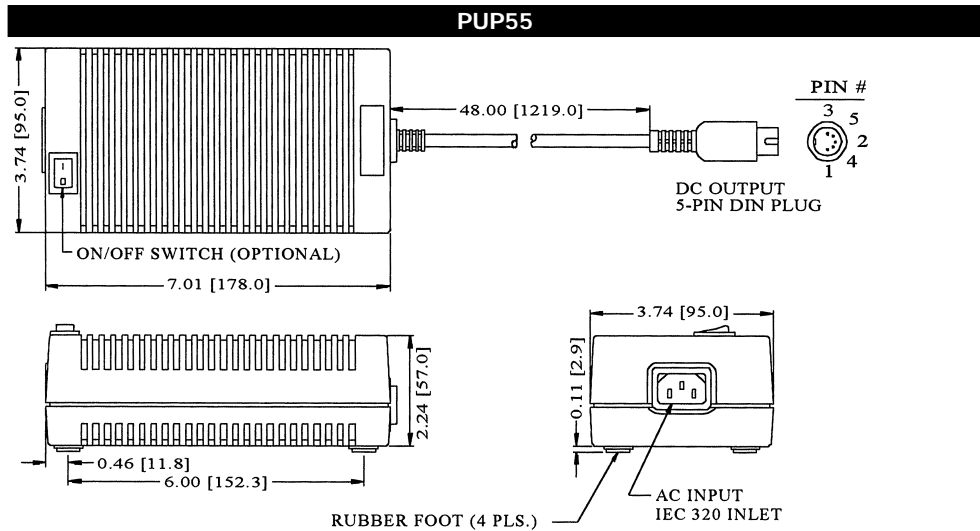
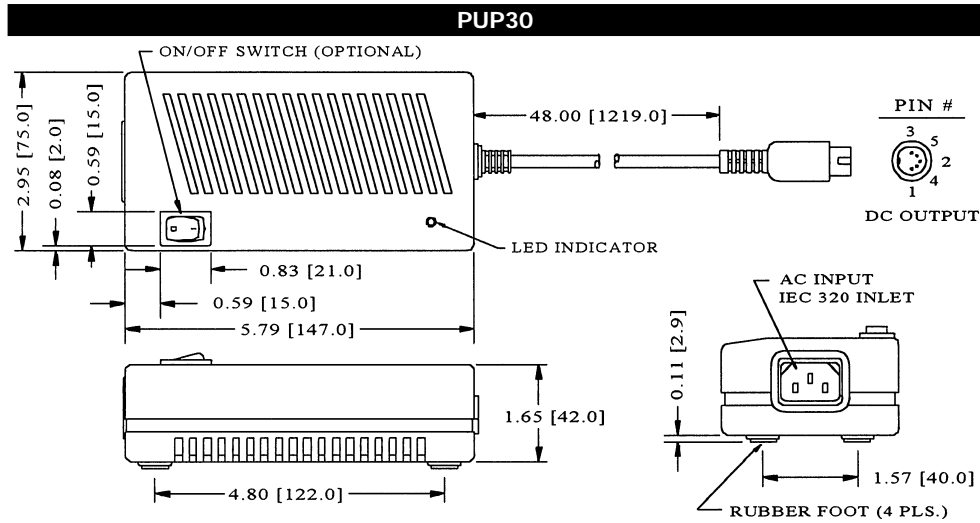
Input Connector	IEC320 socket
Output Connector	Various combinations of cord and plug available. Consult our sales office
Dimensions	PUP30: 147x75x42mm PUP55: 178x95x57mm PUP110: 254x127x68mm
Weight	PUP30: 500g; PUP55: 700g; PUP110: 1.2kg *For detailed data sheet and output Pin connections and connector type, call our sales office

SELECTION TABLE

MODEL NUMBER	OUTPUT #1				OUTPUT #2					OUTPUT #3				OUTPUT #4				MAX. OUTPUT POWER
	Vnom	Imin	I _{max}	Tol	Vnom	Imin	I _{max}	I _{peak}	Tol	Vnom	Imin	I _{max}	Tol	Vnom	Imin	I _{max}	Tol	
PUP30-10	5-6V	0A	5.0A	5%														24W
PUP30-10-1	6-8V	0A	4.5A	2%														27W
PUP30-11	9-11V	0A	3.3A	2%														30W
PUP30-12	11-13V	0A	2.7A	2%														30W
PUP30-13	13-17V	0A	2.3A	2%														30W
PUP30-13-1	17-21V	0A	1.7A	2%														30W
PUP30-14	21-27V	0A	1.4A	2%														30W
PUP30-16	27-33V	0A	1.1A	2%														30W
PUP30-17	33-39V	0A	0.9A	2%														30W
PUP30-23	+5V	0.3A	3.0A	5%	+12V	0.1A	2.0A		5%									30W
PUP30-24	+5V	0.3A	3.0A	5%	+15V	0.1A	1.5A		5%									30W
PUP30-25	+5V	0.3A	3.0A	5%	+24V	0.1A	1.0A		5%									30W
PUP30-31	+5V	0.3A	3.0A	5%	+12V	0A	0.8A		5%	-12V	0A	0.8A	5%					30W
PUP30-32	+5V	0.3A	3.0A	5%	+15V	0A	0.8A		5%	-15V	0A	0.8A	5%					30W
PUP55-10	5-6V	0A	8A	5%														40W
PUP55-10-1	6-8V	0A	7.5A	5%														45W
PUP55-11	9-11V	0A	5A	5%														50W
PUP55-12	11-13V	0A	4.6A	5%														55W
PUP55-13	13-17V	0A	3.7A	3%														55W
PUP55-13-1	17-21V	0A	3.1A	3%														55W
PUP55-14	21-27V	0A	2.3A	3%														55W
PUP55-16	27-33V	0A	1.9A	3%														55W
PUP55-17	33-39V	0A	1.6A	3%														55W
PUP55-23	+5V	1A	5A	5%	+12V	0.5A	3A		5%									55W
PUP55-24	+5V	1A	5A	5%	+15V	0.4A	2.5A		5%									55W
PUP55-25	+5V	1A	5A	5%	+24V	0.3A	2A		5%									55W
PUP55-31	+5V	1A	5A	5%	+12V	0.5A	3A		5%	-12V	0.1A	0.5A	10%					55W
PUP55-32	+5V	1A	5A	5%	+15V	0.4A	2.5A		5%	-15V	0.1A	0.5A	10%					55W
PUP110-10	5V	0A	22A	5%			(N/A)				(N/A)				(N/A)			110W
PUP110-12	12V	0A	9.0A	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	9.0A	5%		(N/A)				(N/A)			110W
PUP110-31	+5V	0A	10A	5%	+12V	0A	5A	9.0A	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	9.0A	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	9.0A	5%	-12V	0A	1A	5%	+12V	0A	1A	5%	110W
PUP110-45	+5V	0A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	1A	5%	+24V	0A	1A	5%	110W
PUP110-45-1	+5V	2A	10A	5%	+12V	0A	5A	9.0A	5%	-12V	0A	1A	5%	+24V	1.5A	3A	10%	110W
PUP110-45-2	+5V	0A	10A	5%	+24V	0A	3A	5.0A	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

NOTES: (1) PUP110 units: peak output current with 10% maximum duty cycle for less than 60 seconds. Total peak power must not exceed 130 watts.
 (2) The output #1 of model PUP110-45-1 needs a minimum current of 2A to support the other outputs at their maximum rated loads.

TECHNICAL DRAWINGS



All dimensions are shown in inches (mm).

NOTE: DC output connector shown for multi output supplies