

DESCRIPTION

The PUP32/41 series of AC-DC switching power supplies are for 20-40 watts of continuous output power. They are enclosed in a 94V-0 rated polycarbonate case with an IEC320/C14 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 22 and FCC class B emission limits and comply with UL, CSA, IEC and CE requirements.

FEATURES

- Operation altitude up to 5000 meters
- High Efficiency
- Overvoltage protection
- Short-circuit protection
- Overcurrent protection
- 100% burn-in at full rated load
- Compliant with DoE level VI requirements
- Compliant with RoHS requirements
- Meet LPS

INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	PUP32-10: 1.0 A (rms) for 115 VAC, 0.5 A (rms) for 230 VAC PUP41-10: 1.2A (rms) for 115 VAC, 0.6 A (rms) for 230 VAC PUP41-14: 1.4A (rms) for 115 VAC, 0.7 A (rms) for 230 VAC
Touch current:	250 μ A max. @ 264 VAC, 60 Hz

OUTPUT SPECIFICATIONS

Output voltage /current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	3% peak to peak on 5V models 1% peak to peak on 24V model
Overvoltage protection:	Set at 130-180% of its nominal output voltage
Overcurrent protection:	Set at 125-160% of its nominal output current
Temperature coefficient:	All outputs $\pm 0.04\%$ / $^{\circ}$ C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 μ s after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	0 $^{\circ}$ C to +40 $^{\circ}$ C
Storage temperature:	-20 $^{\circ}$ C to +80 $^{\circ}$ C
Operating humidity:	20% to 80% non-condensing
Storage humidity:	10% to 90% non-condensing

PUP32/41 SERIES



SAFETY STANDARD APPROVALS



UL 60950-1, CSA C22.2 No. 60950-1
File No. E190414



TÜV EN 60950-1

GENERAL SPECIFICATIONS

Hold-up time:	8 ms minimum at 115 VAC
Turn on delay time:	4 s maximum at 115 VAC
Efficiency:	80% min. on 5V models 87% min. on 24V model
Line regulation:	$\pm 0.5\%$ maximum at full load
Inrush current:	100 A @ 115 VAC or 200 A @ 230 VAC at 25 $^{\circ}$ C cold start
Withstand voltage:	1800 VAC from input to ground and output
MTBF:	100,000 hours at full load at 25 $^{\circ}$ C ambient, calculated per MIL-HDBK- 217F

EMC Performance

EN55022(CISPR 22):	Class B conducted, Class B radiated
FCC:	Class B conducted, Class B radiated
VCCI:	Class B conducted, Class B radiated
EN61000-3-2:	Harmonic distortion, Class A and D
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, ± 8 KV air and ± 4 KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, ± 1 KV
EN61000-4-5:	Surge, ± 1 KV diff., ± 2 KV com.
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 1 A/m
EN61000-4-11:	Voltage dip immunity, 30% reduction for 500 ms, and >95% reduction for 10 ms

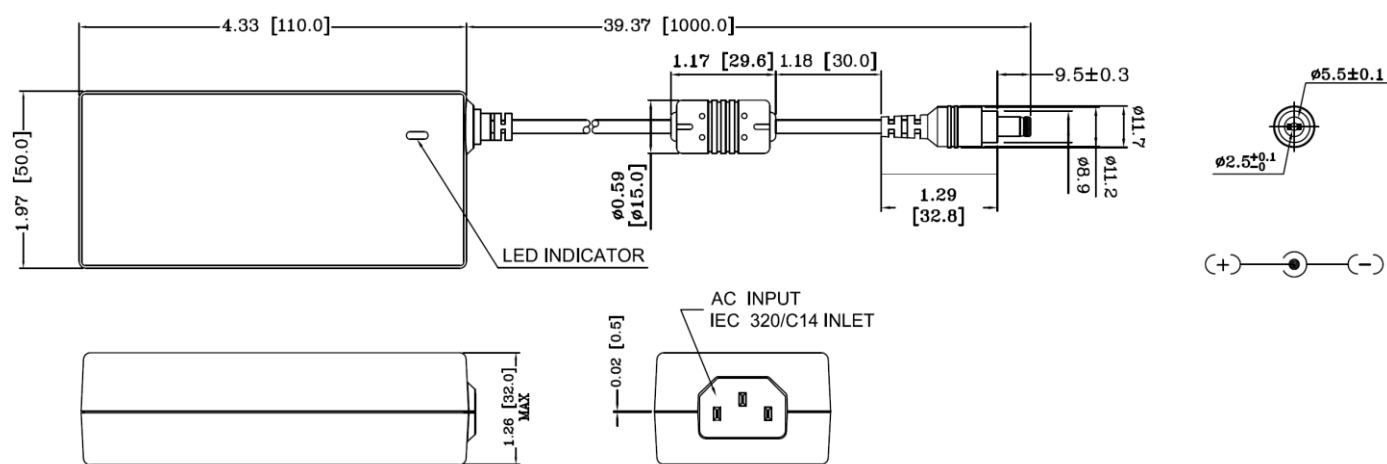
OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output						Average efficiency (typical) @ 115 / 230 Vac
	V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽¹⁾	Max. Power	
PUP32-10	5 V	0 A	4.00 A	±5%	150 mV	20 W	84 / 84%
PUP41-10	5 V	0 A	5.00 A	±5%	150 mV	25 W	84.6 / 84.6%
PUP41-14	24 V	0 A	1.67 A	±5%	240 mV	40 W	88 / 89%

NOTES:

- Ripple and noise is maximum peak-to-peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 μ F electrolytic capacitor in parallel with a 0.1 μ F ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS



NOTES:

- Dimensions shown in inches [mm]
- Tolerance 0.02 [0.5] maximum
- The length of output cable for output voltage 24V is 59.06 [1500.0]
- Weight: 280 grams (0.62 lbs.) approx.
- Output return (-) is electrically connected to incoming Earth Ground through a 0 ohm resistor as standard.

PIN CHART

MODEL	CONNECTION
Polarity	(+) — (●) — (-)