

DESCRIPTION

The PUP40/PUP45 series of AC/DC wall mount switching power supplies are for 40-45 watts of continuous output power. They are enclosed in a 94V-0 rated polycarbonate case. The PUP40M-12 model is shipped with a selected interchangeable AC plug, and additional types of AC plug can be purchased from the factory. All models meet EN55022, EN55024 and FCC class B emission limits, and designed for ITE applications.

FEATURES

- Operation altitude up to 5000 meters
- Interchangeable AC plugs for model PUP40M-12
- High efficiency
- Low ripple & noise
- Overvoltage protection
- Short-circuit protection
- 100% burn-in at full rated load
- Compliant with DoE efficiency level VI requirements
- Compliant with RoHS requirements
- Meet LPS

INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	PUP40: 0.75 A (rms) for 115 VAC, 0.5 A (rms) for 230 VAC PUP45: 0.85A (rms) for 115 VAC, 0.6 A (rms) for 230 VAC
Touch current:	100 μ A max. @ 264 VAC, 63 Hz

OUTPUT SPECIFICATIONS

Output voltage /current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	1% peak to peak maximum
Overvoltage protection:	Set at 108% to 170% of its nominal output voltage
Overcurrent protection:	Protected to short circuit conditions
Temperature coefficient:	$\pm 0.04\%$ / $^{\circ}$ 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

PUP40/PUP45 SERIES



RoHS



SAFETY STANDARD APPROVALS



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



TÜV EN 60950-1

GENERAL SPECIFICATIONS

Hold-up time:	5 ms minimum at 115 VAC
Turn on delay time:	3 s maximum at 115 VAC
Efficiency:	Compliant with DoE efficiency level VI requirements (see rating chart)
Line regulation:	$\pm 1\%$ maximum at full load
Inrush current:	60 A @ 115 VAC or 120 A @ 230 VAC at 25 $^{\circ}$ C cold start
Withstand voltage:	3000 VAC from input to output
MTBF:	500,000 hours at full load at 25 $^{\circ}$ C ambient, calculated per SR332

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

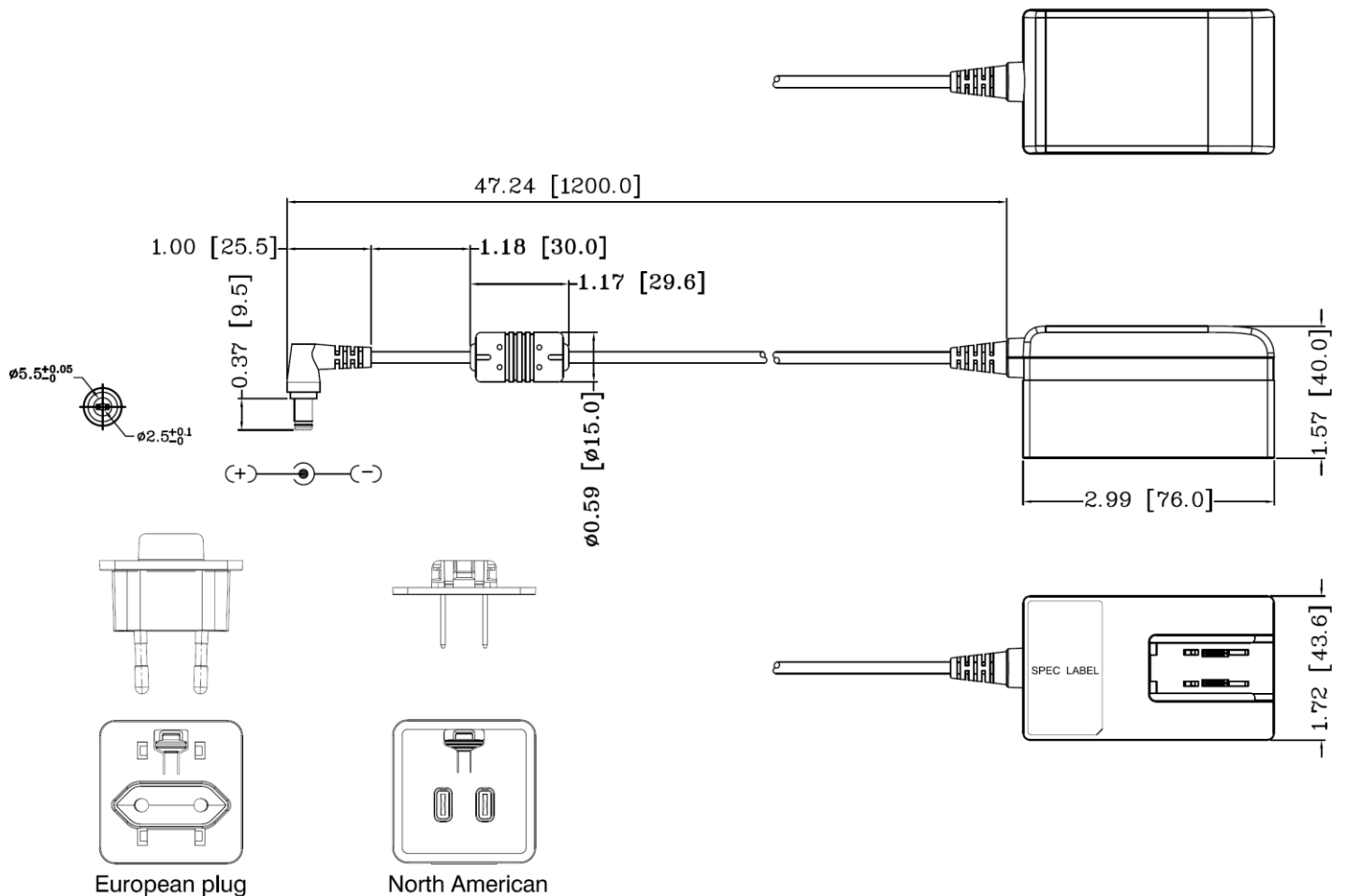
Model ⁽¹⁾	Output						Average Active Efficiency (typical) @ 115 / 230 Vac
	V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽²⁾	Max. Output Power	
PUP40M-12	12 V	0 A	3.34 A	±5%	150 mV	40 W	88 /89%
PUP40D-13-2	19 V	0 A	2.11 A	±5%	200 mV	40 W	88 /89%
PUP40E-13-2	19 V	0 A	2.11 A	±5%	200 mV	40 W	88 /89%
PUP45D-13-2	19 V	0 A	2.37 A	±5%	200 mV	45 W	88 /89%
PUP45E-13-2	19 V	0 A	2.37 A	±5%	200 mV	45 W	88 /89%

NOTES:

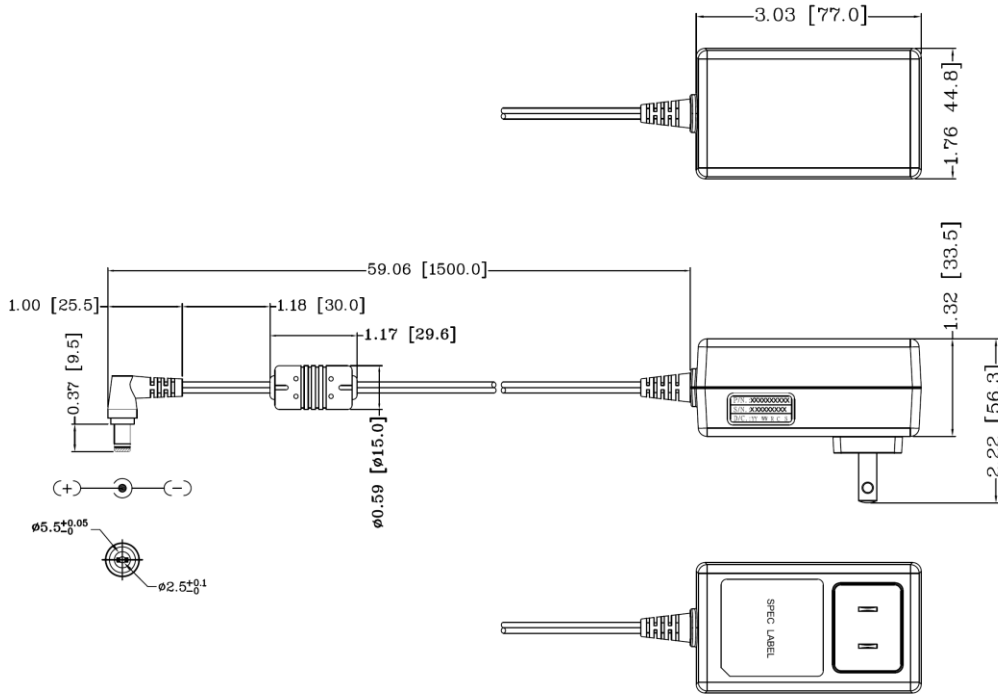
- PUP40M models are for interchangeable AC plugs which are to be ordered separately. PUP40D and PUP45D models are with fixed North American AC plug for safety approval cULus only, and PUP40E/PUP45E models with fixed European AC plug for safety approval TÜV only.
- Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS

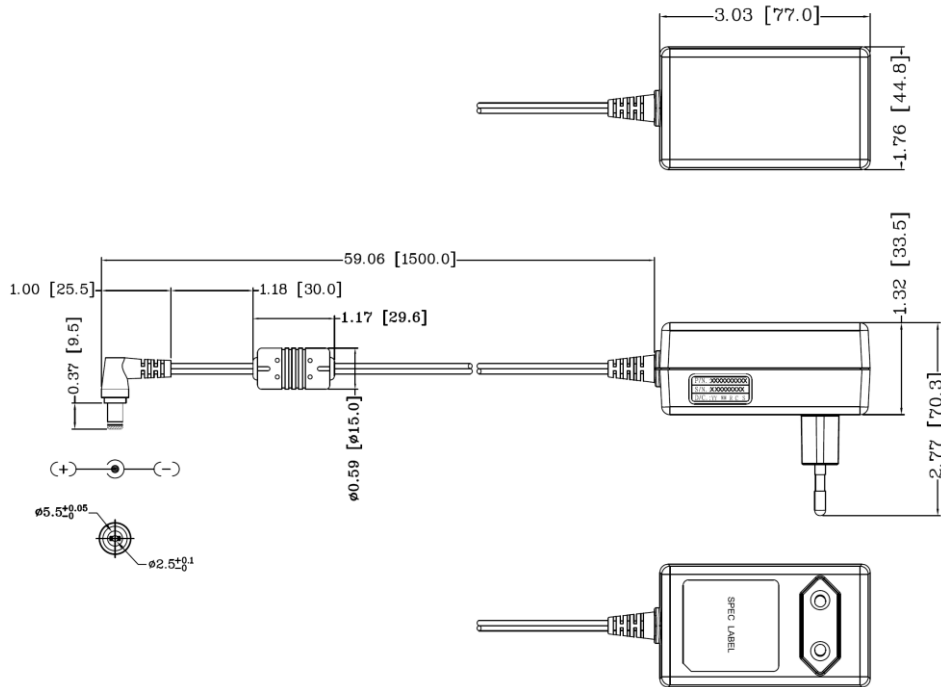
- PUP40M models (Interchangeable AC Plug)



2. PUP40D & PUP45D models (Fixed North American AC Plug, Non-Polarization)



3. PUP40E & PUP45E models (Fixed European AC Plug)



NOTES:

1. Dimensions shown in inches [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 168 grams (0.37 lbs.) approx.
4. Output connector is 5.5 mm O.D., 2.5 mm I.D., 9.5 mm long barrel female 90° connector, center positive voltage.
5. Interchangeable AC plugs can be ordered by referring to the following ordering number:

Type	European plug	US plug (non-polarization)	UK plug	Australia plug	Korea plug	Argentina plug
Ordering no.	50E00021	50E00022	50E00004	50E00002	50E00026	50E00020