DESCRIPTION

The PUP75 series of AC/DC switching power supplies are for 75 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with IEC320/C14, IEC320/C6 or IEC320/C8 inlet to mate with interchangeable cord for world-wide use. All models meet EN55022 and FCC class B emission limits, and are suited for use in data networking, computing, instrumentation and telecommunication applications.

PUP75 SERIES

CE (LVD)

RoHS

FEATURES

- Low safety ground leakage current
- Both Class I and Class II models are certified to ITE safety standards.
- Wide input range 90 to 264 VAC
- 100% burn-in
- Overvoltage protection
- Overcurrent protection
- Compliant with CEC and Energy Star Efficiency level V requirements
  * No load power consumption less than 0.5 W
  * Average active efficiency greater than 87%
- Compliant with RoHS requirements

SAFETY STANDARD APPROVALS

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

TÜV EN 60950-1

INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	50-60 Hz
Input current:	1.30 A (rms) for 115 VAC 0.70 A (rms) for 230 VAC
Touch current:	250 μA max. @ 264 VAC, 60 Hz

OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart.
Maximum output power:	See rating chart.
Ripple and noise:	See rating chart.
Overvoltage protection:	Provided and set at 110-150% of its nominal output voltage
Overcurrent protection:	Protected to short circuit conditions
Temperature coefficient:	±0.04% /℃ maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	0℃ to +40℃
Storage temperature:	-40℃ to +85℃
Relative humidity:	5% to 95% non-condensing

GENERAL SPECIFICATIONS

Switching frequency:	75-100 KHz
Power factor:	0.90 Typical at 115 VAC
Efficiency:	87% min. at full load
Hold-up time:	15 ms minimum at 115 VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	65 A @ 115 VAC or 130 A @ 230 VAC, at 25℃ cold start
Withstand voltage:	1800 VAC from input to ground and output for class I, 3000 VAC from input to output for class II
MTBF:	150,000 hours at full load at 25℃ ambient , calculated per MIL-HDBK-217F

EMC Performance

EN55022:	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

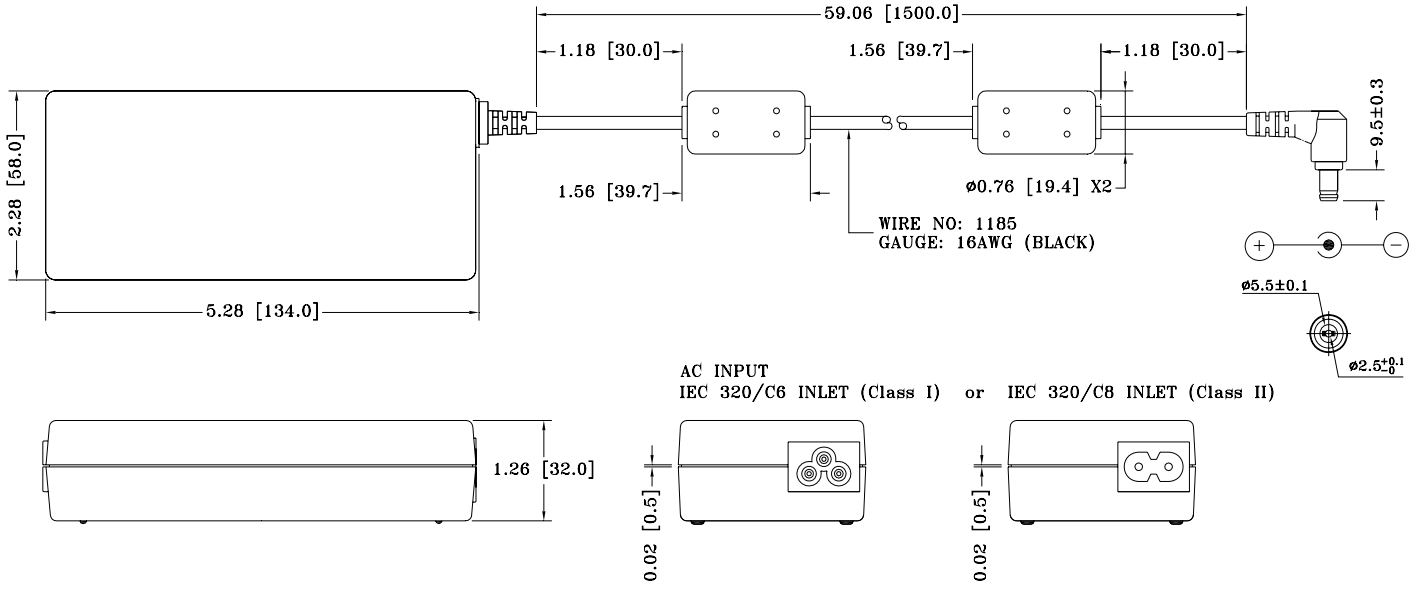
Model(1)			Output						Average Active Efficiency (typical) @ 115 / 230 Vac
Class I		Class II							
INLET C14	INLET C6	INLET C8	V1	Min. Current	Max. Current	Tol.	Ripple & Noise(2)	Max. Power	
PUP75-12	PUP75S-12	PUP75SF-12	12 V	0 A	6.25 A	±5%	150 mV	75 W	88 / 88 %
PUP75-13-2	PUP75S-13-2	PUP75SF-13-2	19 V	0 A	3.94 A	±5%	190 mV	75 W	88 / 88 %
PUP75-13-3	PUP75S-13-3		20 V	0 A	3.75 A	±5%	200 mV	75 W	88 / 88 %

NOTES:

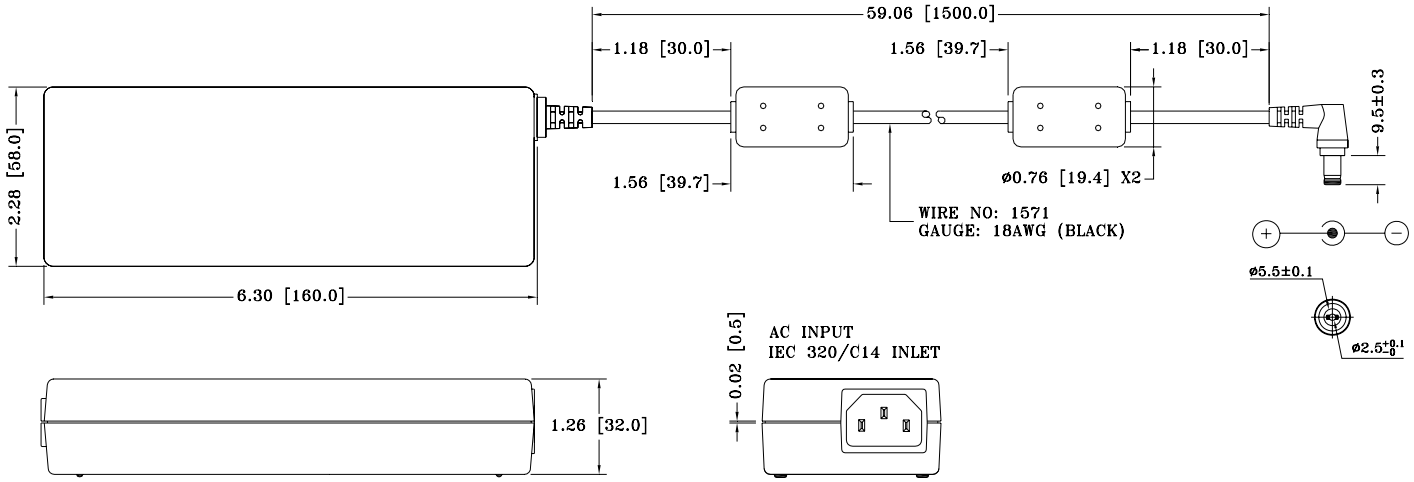
1. Class I models are equipped with IEC320/C14 inlet or IEC320/C6 inlet, and class II models with IEC320/C8 inlet.
2. Ripple and noise is maximum peak-to-peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF electrolytic capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS

PUP75S and PUP75SF Models



PUP75 Models



NOTES:

1. Dimensions shown in inches [mm]
2. Tolerance 0.02 [0.5] maximum
3. Weight: 400 grams (0.884 lbs.) approx. with C6 inlet and C8 inlet
4. Weight: 460 grams (1.017 lbs.) approx. with C14 inlet