

- Compact Size 1.5" x 3.0" x 0.94"
- Single Outputs
- Wide-range Input 90-264 VAC
- Level B Emissions
- RoHS Compliant
- Three Mechanical Formats
- CEC Level V Compliant
- LPS Compliant



### Electrical Specifications

#### Input

Input Voltage	90-264VAC
Input Frequency	47-63 Hz
Input Current	1.1A (rms) for 100VAC 0.5A (rms) for 240VAC
Earth Leakage Current	400 $\mu$ A max. @ 264 VAC, 60 Hz
No Load Input Power	<0.3 watts

#### Output

Output Voltage/Current:	See rating chart
Maximum Output Power:	See rating chart
Ripple and Noise	See rating chart
Overvoltage Protection:	Set at 110-130% of its nominal output voltage
Overcurrent Protection:	All outputs protected to short circuit conditions. Auto recovery.
Temperature Coefficient:	All outputs $\pm 0.04\%$ / $^{\circ}$ C maximum
Transient Response:	Maximum excursion of 5% or better on all models, recovering to 1% of final value within 500 us after a 50% step load change.

#### Environmental

Operating Temperature:	0 $^{\circ}$ C to +70 $^{\circ}$ C
Storage Temperature:	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Relative Humidity:	5% to 95% non-condensing
Derating:	Derate from 100% to +50 $^{\circ}$ C linearly to 50% at +70 $^{\circ}$ C

#### General

Switching Frequency:	60-70 KHz
Efficiency:	Up to 91%, see rating chart
Hold-up Time:	6 ms minimum at 115 VAC
Line Regulation:	$\pm 0.5\%$ maximum at full load
Inrush Current:	80A @ 230 VAC, at 25 $^{\circ}$ C cold start
Withstand Voltage:	3000 VAC from input to output 1500 VAC from input to ground 500 VAC from output to ground
MTBF	150,000 hours at full load at 25 $^{\circ}$ C ambient calculated per MIL-HDBK-217F
LPS	All models, except PPWA40-10

#### Safety & EMC

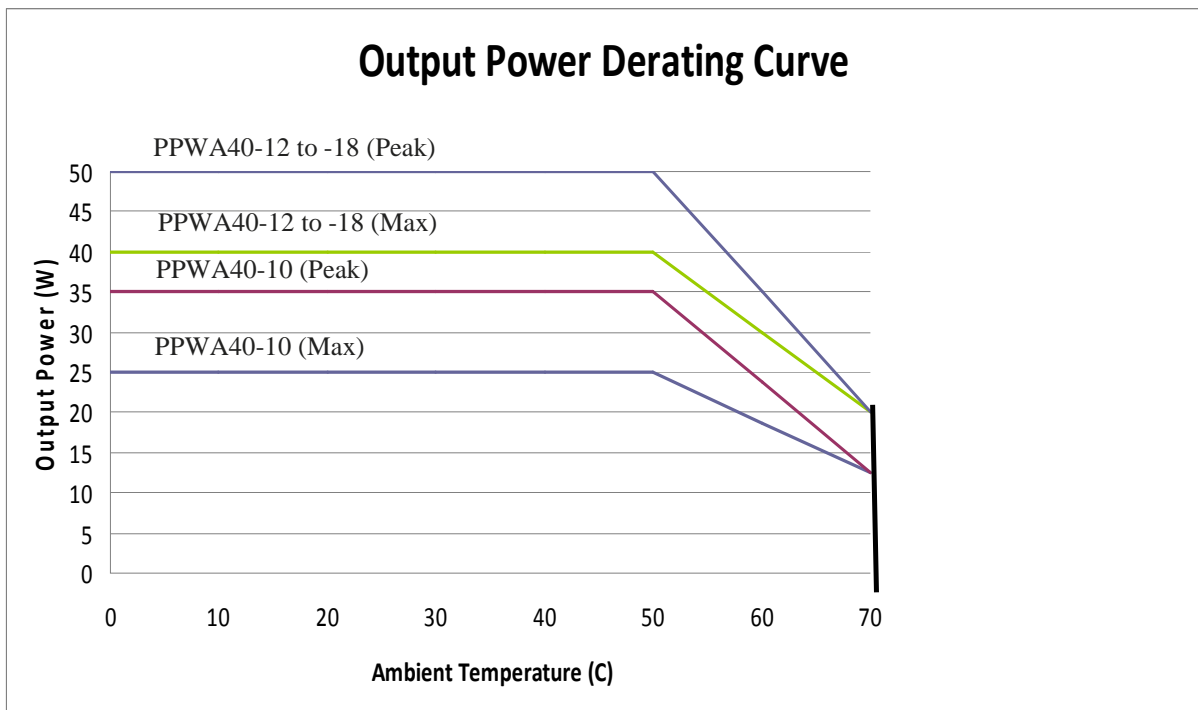
Safety Approvals	
USA	UL60950-1
Canada	CSA C22.2 No. 60950-1
Europe	Nemko EN60950-1 CB IEC 60950-1
EN55022:	Class B conducted, class B radiated
FCC:	Class B conducted, class B radiated
VCCI:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, class A
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm 8$ KV air and $\pm 4$ KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst $\pm 1$ KV
EN61000-4-5:	Surge, $\pm 1$ KV diff., $\pm 2$ KV com
EN61000-4-6:	Conducted immunity, 3 Vms
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



### Models and Ratings Chart

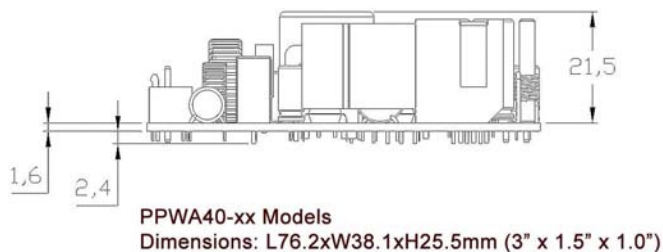
Model	Nominal Voltage	Tolerance	Output Current			Power		Efficiency	Ripple & Noise
			Min	Max	Peak	Max	Peak		
PPWA40-10	5VDC	±5%	0A	5.00A	7.00A	25W	35W	84%	100mV
PPWA40-12	12VDC	±5%	0A	3.34A	4.17A	40W	50W	87%	120mV
PPWA40-13	15VDC	±5%	0A	2.67A	3.34A	40W	50W	89%	150mV
PPWA40-13-1	18VDC	±5%	0A	2.23A	2.78A	40W	50W	89%	180mV
PPWA40-14	24VDC	±5%	0A	1.67A	2.09A	40W	50W	90%	240mV
PPWA40-17	36VDC	±5%	0A	1.12A	1.39A	40W	50W	90%	240mV
PPWA40-18	48VDC	±5%	0A	0.84A	1.05A	40W	50W	91%	240mV

See mechanical drawings for input/output connection options and add suffix to model number. For example, PPWA40-10T or PPWA40-10U

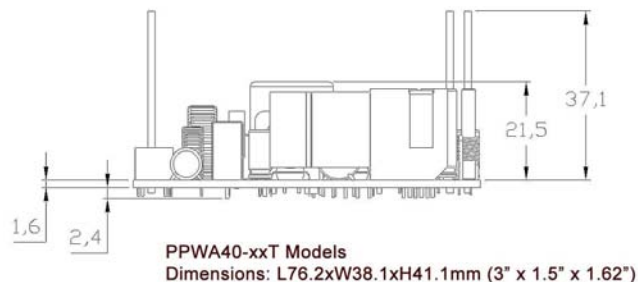


## Mechanical Outline & Pin Connections

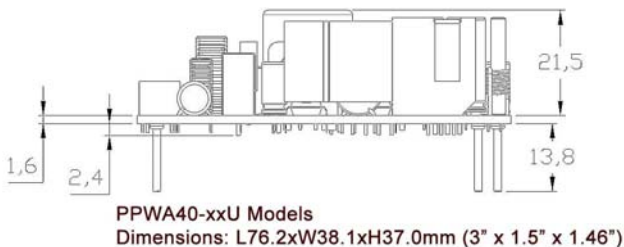
PPWA40-1X Models



PPWA40-1XT Models



PPWA40-1XU Models



### Connector Information:

#### CN1: Input Connector

JST B3P-VH-B pitch: 7.92mm or equivalent,  
mates with JST VHR-3N or equivalent

Pin #	Signal
1	AC Neutral
2	AC Line

#### CN2: Output Connector

JST B2P-VH-B pitch: 3.96mm or equivalent,  
mates with JST VHR-2N or equivalent

Pin #	Signal
1	GND
2	+Vo

### Connectors and Pin Assignment

