

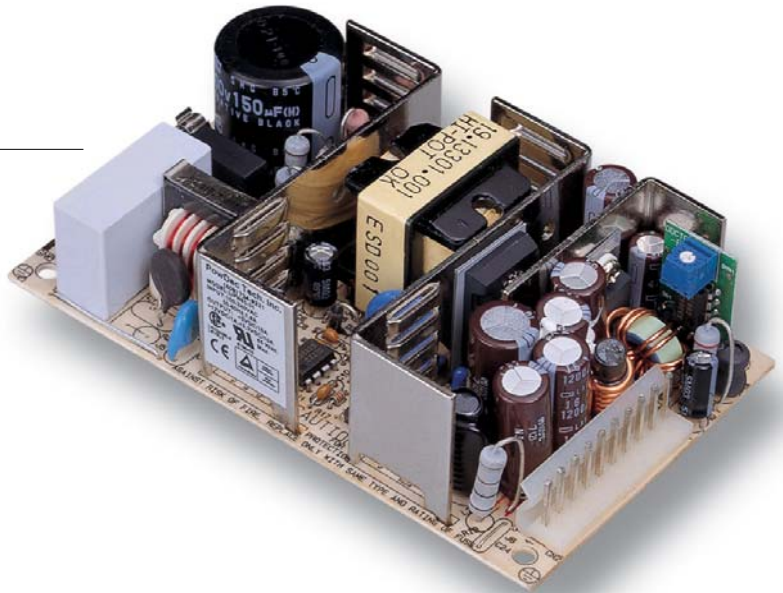
# UPN65 Series

## 65 Watts

### Triple Output Switching Power Supply

#### Features:

- \* Small 5.00 x 3.00 x 1.34" Open Frame Package
- \* V1 & V2 Power Share for Flexible Load Conditions
- \* Convection Cooled Operation
- \* Universal AC Input (47-63 Hz)
- \* 100,000 hours MTBF (25°C Full Load Operation)
- \* Class B Emissions
- \* Optional -40°C Operating Temperature
- \* International Safety Approvals & CE Mark
- \* 3 Year Warranty



#### Input Specifications:

Input Range	Universal VAC (90-264 VAC) & 120-370 VDC
Input Frequency	47-63 Hz or DC
Inrush Current	25A @ 115VAC / 50A @ 230VAC max (cold start)
Input Current	1800mA @ 90 VAC / 800mA @ 200 VAC Maximum
Input Reflected Ripple	FCC 68 part 15 Class B
Efficiency	65% Typical (depending on output model)
Input Protection	Single Fused (4 Amp / 250 V)
Hold-up Time	Half Cycle Minimum @ 120 VAC and 80% load
Leakage Current	< 750 $\mu$ A maximum @ 264 VAC
Harmonics	EN61000-3-2 Class D

#### Output Specifications:

Adjustment Range	Fixed at Factory
Minimum Load	See Output Table
Regulation	V1 & V2 = $\pm 3\%$   V3 = $\pm 10\%$ max
Ripple / Noise	$\pm 1\%$ pk-pk max (20MHz)
Transient Response	< 1msec recovery
Set-Point Accuracy	$\pm 2\%$
Short Circuit Protection	Continuous
Over Load Protection	125-150%, automatic recovery
Over Voltage Protection	120-150%, latched shutdown

#### Emissions Standards

FCC Part 15J, Part 2	Within Class B Limits
EN55022 / CISPR22	Within Class B Limits

#### Electromagnetic Compatibility:

Electrostatic Discharge	EN61000-4-2, $\pm 4$ KV Contact / $\pm 8$ KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, $\pm 2$ KV
Surges	EN61000-4-5, $\pm 2$ KV Line-Earth, $\pm 1$ KV Line-Line
Conducted Immunity	EN61000-4-6, 0.15 - 800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-11, 95% Dip & 10ms, 30% Dip & 500ms
Voltage Interruptions	EN61000-4-11, 95% Reduction, 5s
Radiated Emissions	FCC 68 part 15 Class B
Conducted Emissions	FCC 68 part 15 Class B
Harmonic Current	EN61000-3-2 Class D
Fluctuations & Flicker	EN61000-3-3

#### Environmental Specifications:

Operating Temp	0 ~ 50°C (De-Rate 2.5%/1°C Rise To +70°C)
Storage Temp	-20 ~ +85°C
Cooling	Convection Cooled Operation
Temp Co-Efficient	0.05% per degrees celsius
Humidity	5 to 95% RH Non-Condensing
Vibration	3 Axes 1 Oct/min, 5 min at 4 Res. 0.75G Pk, 5-500Hz
Shock	20G Peak Acceleration
Reliability	> 100k hours MTBF (Full Load and 25°C Operation)

#### International Safety Approvals

Standards	UL 60950 (3rd Edition), File # E158470
	CSA 22.2 No. 60950
	TUV EN60950
	CE Mark (LVD)

**PowDec**  
Technologies, Inc.

PowDec Technologies (Taiwan) Inc.  
No. 9, Alley 9, Lane 392, Fu Teh  
1st Road Hsi Chih, Taipei Hsien, Taiwan, 22150  
Tel: (02)2694-2760  
Fax: (02)2694-2753  
E-mail: powdec@ms3.hinet.net  
<http://www.powdec.com.tw>

PowDec Technologies (USA) Inc.  
7013 Realm Drive, Suite E  
San Jose, CA 95119 U.S.A.  
Tel: (408) 362-9388  
E-mail: tedkang@powdec.com  
<http://www.powdec.com>

## Output Table:

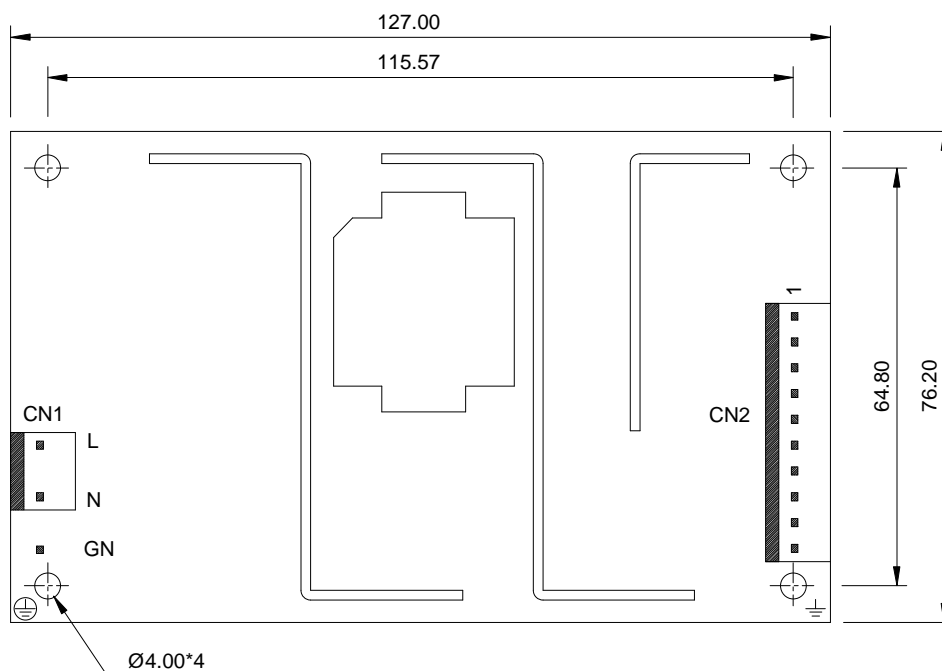
Model Number	V1	Io Min	Io Max	V2	Io Min	Io Max	V3	Io Min	Io Max
UPN65-31	+3.3VDC	1000mA	10.0A	+5VDC	1000mA	10.0A	+12VDC	100mA	1.0A
UPN65-32	+5VDC	1000mA	10.0A	+12VDC	500mA	5.0A	-12VDC	100mA	1.0A

Note: Total Output Power May not exceed 65 Watts

## Mechanical Specifications:

Construction: Open Frame

Weight: 0.802 lb / 0.364 kg



## Input Pin Assignments:

CN1-1 Line  
CN1-2 Neutral

## Output Pin Assignments:

CN2-1 V3  
CN2-2 V1  
CN2-3 V1  
CN2-4 V1  
CN2-5 RTN  
CN2-6 RTN  
CN2-7 RTN  
CN2-8 V2  
CN2-9 V2  
CN2-10 V2

## Mating Connectors:

CN1 (AC Input) Mating Connector:  
Molex 09-52-4034 (5239 series)

CN2 (DC Output) Mating Connector:  
Molex 09-52-4104 (5239 series)