

UPN100 Series

100 Watts

Single & Dual Output Switching Power Supply

Features:

- * Small 5.0 x 3.30 x 1.50" U-Frame Package
- * Active Power Factor Correction
- * Universal AC Input (47-63 Hz)
- * Convection Cooled Operation
- * 100,000 hours MTBF (25°C Full Load Operation)
- * Class B Emissions
- * 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	3000mA @ 90 VAC / 1350mA @ 200 VAC Maximum
Input Reflected Ripple	FCC 68 part 15 Class B
Efficiency	75% 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	<750µA maximum @ 264 VAC
Harmonics	EN61000-3-2 Class A

Output Specifications:

Adjustment Range	Fixed at Factory
Minimum Load	See Output Table
Regulation	V1 = 3% V2 = 10% max
Ripple / Noise	± 1% pk-pk max (20MHz)
Transient Response	+/- 5% Deviation / < 1msec recovery
Set-Point Accuracy	±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, ±4KV Contact / ±8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, ± 2KV
Surges	EN61000-4-5, ±2KV Line-Earth, ±1KV 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 A
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	30 cfm airflow required for full load or derate 25%
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)

Output Table:
UPN100 Series

Model Number	Max Power	V1	Io Min	Io Max	V2	Io Min	Io Max
UPN100-3.3V	66 Watts	3.3VDC	2000mA	20.0A	-	-	-
UPN100-5V	100 Watts	5VDC	2000mA	20.0A	-	-	-
UPN100-12V	100 Watts	12VDC	800mA	8.3A	-	-	-
UPN100-15V	100 Watts	15VDC	500mA	6.6A	-	-	-
UPN100-24V	100 Watts	24VDC	200mA	4.2A	-	-	-
UPN100-48V	100 Watts	48VDC	200mA	2.1A	-	-	-
UPN100-3.3V-5V	100 Watts	+3.3VDC	2000mA	20.0A	+5VDC	200mA	0.5A
UPN100-5V -12V	100 Watts	+5VDC	2000mA	20.0A	+12VDC	200mA	0.5A

Mechanical Specifications:

Construction: U-Frame

Weight: 1.084 lb / 0.492 kg

Input Pin Assignmnets:

 CN1-1 Line
 CN1-2 Neutral

Output Pin Assignmnets:

 CN2-1 V2 or NC
 CN2-2 V1
 CN2-3 V1
 CN2-4 V1
 CN2-5 V1
 CN2-6 V1
 CN2-7 RTN
 CN2-8 RTN
 CN2-9 RTN
 CN2-10 RTN
 CN2-11 RTN
 CN2-12 RTN

Mating Connectors:

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

 CN2 (DC Output) Mating Connector:
 Molex 09-50-2120 (2139 series)
