

# UPE65-U Series

## 65-75 Watts

### Triple Output Switching Power Supply

#### Features:

- \* Small 5.00 x 3.30 x 1.50" U-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
- \* 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 = 3%   V3 = 10% max
Ripple / Noise	$\pm$ 1% pk-pk max (20MHz)
Transient Response	+/- 5% Deviation / < 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, $\pm$ 4KV Contact / $\pm$ 8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, $\pm$ 2KV
Surges	EN61000-4-5, $\pm$ 2KV Line-Earth, $\pm$ 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 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	31.5 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
	CB Report (IEC 60950 3rd Edition) File # E158470-A2-CB-1
	CE Mark (LVD)

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**Output Table:**

Model Number	V1	Io Min	Io Max	V2	Io Min	Io Max	V3	Io Min	Io Max
UPE65-31-U	+3.3VDC	1000mA	10.0A	+5VDC	1000mA	10.0A	+12VDC	100mA	1.0A
UPE65-33-U	+3.3VDC	1000ma	12.0A	+5VDC	1000mA	10.0A	+12VDC	100mA	1.0A
UPE65-32-U	+5VDC	1000ma	10.0A	+12VDC	500mA	5.0A	-12VDC	100mA	1.0A
UPE65-34-U	+5VDC	1000ma	10.0A	+12VDC	500ma	5.0A	+24VDC	100mA	500mA
UPE65-35-U	+3.3VDC	1000ma	10.0A	+5VDC	1000ma	10.0A	-5VDC	100mA	1.0A
UPE65-36-U	+5VDC	1000ma	6.0A	+15VDC	300ma	1.58A	-15VDC	100mA	750mA

Note: Total Output Power May not exceed 75 Watts for UPE65-33-U Model and 65 Watts for all other models.

**Mechanical Specifications:** Construction: U-Frame Weight: 0.943 lb / 0.428

**Input Pin Assignmets:**

- CN1-1 Neutral
- CN1-2 Line

**Output Pin Assignmets:**

- 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 09-65-2038 or equivalent

CN2 (DC Output) Mating Connector:  
Molex 09-65-2108 or equivalent

