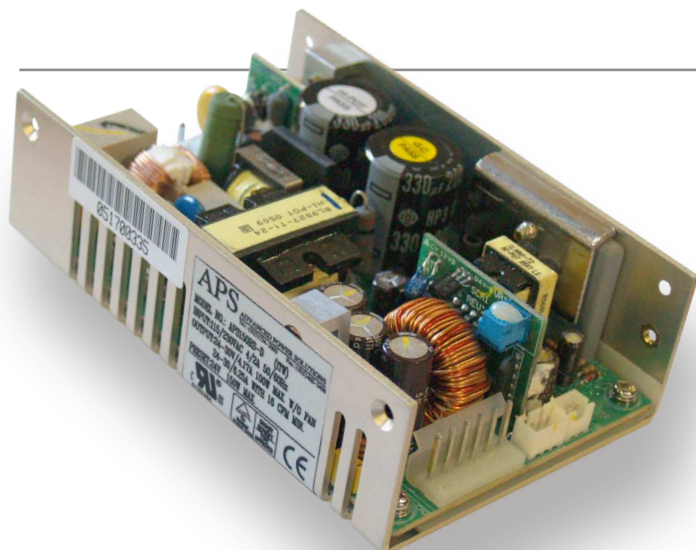


## APS250Rx SERIES:



### 250 Watts Single Output Models

- 5.00 x 3.20 x 1.50" U-Frame Package
- 5.00 x 3.20 x 2.00" Top-Mount Fan Package

### Features:

- Auto-Ranging AC Input (90-132 / 180-264 VAC)
- Power Factor Correction for EN61000-3-2 Class A Compliance
- Peak Loads up to 600 Watts for 500µs
- Ruggedized Aluminum Enclosure
- International Safety Approvals
- 2 Year Warranty

### INPUT:

Input Voltage	90~132 / 180~264 VAC (Auto-Ranging)
Input Frequency	47-63Hz
Inrush Current	35A / 70A Max @ 115/ 230 VAC Cold Start
Input Current	6A/3A @ 100-120/200-240 VAC
Input Protection	Single Fuse - T8A / 250VAC
Hold-Up Time	20ms @ 80% Load / Minimum
Leakage Current	<1000µA @ 240 VAC Maximum
Power Factor	EN61000-3-2 Class A Compliant
Harmonics	EN61000-3-2 Class A

### GENERAL:

Efficiency	70-85% (depending on output model)
Operating Temperature	0-70°C, derate linearly to 50% Load at 70°C
Storage Temperature	-20°C to +85°C
Over-Temp Protection	>110°C Shutdown (Ambient)
Cooling	16 cfm airflow required for full load Cinsult APS for Convection Cooled Operation
Operating Humidity	5-90% RH, Non-Condensing
Vibration	5 ~ 50 Hz, acceleration 7.35 m/s*s on X,Y and Z Axis
MTBF	>100k Hrs (according to MIL-HBK-217F) at 30°C

### OUTPUT:

Adjustment Range	±5%
Minimum Load	1% to maintain Regulation
Regulation	±1% max
Ripple & Noise	±1% typ. pk-pk @ 20MHz
Overload Protection	110-140% of max power (Foldback)
Over Voltage	Latching before 130% of nominal
Short Circuit Protection	Trip without damage & auto-recovery
Transient Response	recovers <2.5ms following a 50% load change
Overshoot	Turn-on & off overshoot < 5% over nominal voltage
Turn-On Delay	1 Second maximum at 230VAC
Switching Frequency	25KHz (Fixed)

### EMC:

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	EN61000-4-10, 95% Dip & 10ms, 30% Dip & 500ms
Voltage Interruptions	EN61000-4-11, 95% reduction, 5s
Fluctuations & Flicker	EN61000-3-3

### STATUS & CONTROL:

Remote on/off	Low signal to inhibit output
Power Good	high 100- 500mS after DC Regulation goes low at least 1mS before loss of regulation
Power Supply On	Green LED on PCB
Fan Output	12 VDC @ 300mA

### APPROVALS:

Emissions EN55022 "B", FCC Part 15 Subject J Class B

Safety Approvals UL/cUL 60950-1  
TUV EN60950-1  
CB IEC60950-1  
CE Mark (LVD)

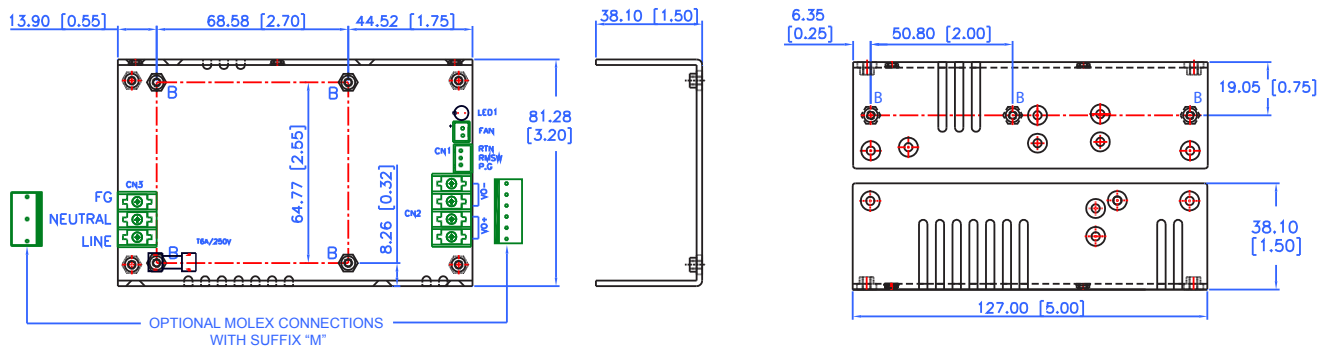
## APS250Rx SERIES:

### Output Specifications:

Model:	Vout	Convection Ratings		With Airflow		Factory Setpoint Range
		Current	Power	Current	Power	
APS250Rx-05	5.0 V	20 A	100 Watts	40.00 A	200 Watts	2.0 ~ 5.0 VDC
APS250Rx-09	9.0 V	13.5 A	121.5 Watts	25.00 A	225 Watts	6.0 ~ 10 VDC
APS250Rx-12	12 V	11.25 A	135 Watts	20.83 A	250 Watts	11 ~ 13.8 VDC
APS250Rx-15	15 V	9.00 A	135 Watts	16.67 A	250 Watts	14 ~ 15.5 VDC
APS250Rx-18	18 V	7.50 A	135 Watts	13.89 A	250 Watts	16 ~ 20 VDC
APS250Rx-24	24 V	5.63 A	135 Watts	10.42 A	250 Watts	21 ~ 26 VDC
APS250Rx-28	28 V	4.82 A	135 Watts	8.93 A	250 Watts	27 ~ 34 VDC
APS250Rx-36	36 V	3.75 A	135 Watts	6.94 A	250 Watts	35 ~ 42 VDC
APS250Rx-48	48 V	2.81 A	135 Watts	5.10 A	250 Watts	43 ~ 50 VDC
APS250Rx-54	54 V	2.50 A	135 Watts	4.62 A	250 Watts	51 ~ 60 VDC

- Replace "x" with U to designate U-Frame Package or "F" for Top-Mount Fan Cover
- Consult APS for any Output Voltage within the specified Factory Setpoint Ranges above (All safety approvals are maintained)
- Standard Input / Output Connections are Terminal Blocks. Add Suffix "M" to designate Molex Connections:
  - Input Connector(CN3): Mating Molex Part No. 09-91-0500 or equivalent (5 pin, 3 used) PCB is Labeled: L = Line; N = Neutral; G = Chassis Ground Mating Pins; Molex Engineering Series 2478, 2578, 8818 or Howder M3. 3 pin Terminal block 6.35MM Center (HD-601-3P).
  - Output Connector (CN2): Mating Molex Part No. 09-91-0600. Mating Pins: Molex Engineering Series 2478, 2578, 8818. or Howder HD-601-4P
- Power Good, Remote On/Off mating connectors (CN1): Mating JST Part No. XHP-3 or equivalent (CHYAO SHIUNN JS-2001-03). Mating Pins: JST SXH-002T-P0.6 FOR AWG 30 to 26.
- Fan Drive: Mating JST Part No. XHP-2 or equivalent (CHYAO SHIUNN JS-2001-02).
- Mounting Inserts: 7 Places M3. Maximum Penetration 3.8mm. Designated as "B" on mechanical drawing below.

### U-FRAME PACKAGE:



### TOP-MOUNT FAN PACKAGE:

