



### 200 Watts Single Output Models

- 6.80 x 3.80 x 1.50" U-Frame Package

#### Features:

- Universal AC Input (90-132 / 180-264 VAC)
- Active PFC for EN61000-3-2 Class D Compliance
- Peak Loads up to 600 Watts for 500µs
- Low Profile for 1U High Applications
- Remote on/off, Remote Sense & Power Good Functions
- 12V Aux Fan Output
- International Safety Approvals
- 2 Year Warranty

#### INPUT:

Input Voltage	90~264 VAC (Universal)
Input Frequency	47-63Hz
Inrush Current	35A @ 110 VAC Cold Start
Input Current	4A @ 100 VAC (full load)
Input Protection	Single Fuse - 5A / 250VAC
Hold-Up Time	20ms @ 80% Load
Leakage Current	<1500 µA @ 240 VAC Maximum
Power Factor	EN61000-3-2 Class D Compliant

#### GENERAL:

Efficiency	70~83% typical
Operating Temperature	0-70°C, derate linearly to 50% Load at 70°C
Storage Temperature	-20°C to +85°C
Over-Temp Protection	>85°C Shutdown (Ambient)
Cooling	17 cfm airflow required for full load
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% or 50mV typ. pk-pk @ 20MHz (whichever is greater)
Overload Protection	110-140% of max power (Hiccup Mode)
Over Voltage	Latching before 130% of nominal
Short Circuit Protection	Trip without damage & auto-recovery
Transient Response	recovers <500µs following a 50% load change
Overshoot	Turn-on & off overshoot < 5% over nominal voltage
Turn-On Delay	1 Second maximum at 120VAC

#### 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 Sense	Compensates for <250mV Drop
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	12VDC @ 300mA

#### APPROVALS:

Emissions	EN55022 "B", FCC Part 15 Subject J Class B
Safety Approvals	UL/cUL 60950-1 CSA22.2 No. 60950-1 TUV EN60950-1 CB IEC60950-1 CE Mark (LVD)

**Output Specifications:**

Model:	Vout	Convection Ratings		With 17 cfm Airflow		Factory Setpoint Range
		Current	Power	Current	Power	
APS200RS-3	3.3 VDC	22A	72.6 Watts	30A	99 Watts	3 ~ 4 VDC
APS200RS-5	5.0 VDC	22A	110 Watts	40A	200 Watts	5 ~ 6 VDC
APS200RS-12	12 VDC	12.5A	150 Watts	16.67A	200 Watts	12~18 VDC
APS200RS-15	15 VDC	10A	150 Watts	13.33A	200 Watts	12~18 VDC
APS200RS-24	24 VDC	6.25A	150 Watts	8.33A	200 Watts	24~30 VDC
APS200RS-48	48 VDC	3.125A	150 Watts	4.17A	200 Watts	36~56 VDC

- Consult APS for any Output Voltage within the specified Factory Setpoint Ranges above (All safety approvals are maintained)
- Standard Connections are Molex. Add the Suffix "T" to designate Terminal Block connectors.
- AC Input Connector (CN1): 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 Terminal block Part No. FTB-702-3P (3 pin).
- Output Connector (CN2): Mating Molex Part No. 09-91-1200 (12 pin) or Howder Terminal block Part No. HD-301-4P (4 pin).
- Logic signal connectors (CN3): Mating JST XHP-6 or equivalent (CHYAO SHIUNN JS-2001-06). 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: 8 Places M4. Maximum Penetration 4mm see outline drawing for location.

**OUTLINE DRAWING:**

