

UNIVERSAL AC INPUT HARMONIC CORRECTION AC-DC HOT-SWAP CompactPCI QUAD OUTPUT 300 WATTS ACTIVE CURRENT SHARING SWITCHING POWER SUPPLIES APS300ACP SERIES



FEATURES:

- 300W 6U X 8HP EUROCARD PACKAGE
- MEET IEC1000-3-2 HARMONIC CORRECTION
- OR-ING DIODES FOR N+1 REDUNDANCY
- HOT-SWAPPABLE
- THIRD-WIRE CURRENT SHARING
- EMI MEETS EN 55022 / FCC CLASS B
- CE MARKING COMPLIANCE
- FULLY COMPLIANT WITH PICMG

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac.
Input On/Off switch: Option.
Power Factor Correction: Meet Harmonic Correction IEC1000-3-2. Power Factor typ.0.99.
Input Connector: Positronic 47-pin PCIH47M400A1.
Input Frequency: 47-63Hz.
Inrush Current: Typ. 30A @ 230Vac.(Active).
Input Current: Typ. 4.0A@115Vac/2.0A @ 230Vac.
Dielectric Withstand: Meet IEC950 regulation.
Transient Protection: MOV withstands transient as specified by EN61000-4-4 level 3.
EMI: Meet EN55022 / FCC Class B.
Hold-up Time: Typ. 30mS @ 115Vac,34mS @ 230Vac.
Remote ON/OFF: Available at [INH#] & [EN#] pins.
Power Fail Signal: Available at [FAL#] pin.
Status LED: <Green> = valid input; <Amber> = critical fault.
Thermal Protection (OTP): Installed NTC and thermostat for thermal sensor at [DEG#] pin.
Power OK: Installed at all outputs.
Leakage Current: Typ. 0.7A @ 230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Power: Typ. 300W continuous.
Output Connector: Positronic 47-pin PCIH47M400A1.
Line Regulation: Typ. 0.1%.
Load Regulation: VO1 & VO2 typ.±0.5-1.0%.
VO3 & VO4 typ.±1.0-3.0%.
Noise & Ripple: Typ. 1% peak-peak or 50mV,which is greater.
OVP: Built-in at all outputs.
Adjustability: Available at VO1, 2 & 3.
Output Trim: Electrical trim available at VO1 / VO2.[ADJ #].
Remote Sensing: Available at VO1,VO2 & VO3.
Hot-Swap: Available
N+1 Redundancy: Internal OR-ing diodes at all outputs.
Current Sharing: Third-wire current sharing at VO1,2&3.
DC OK Signal: Available for all outputs.
Power OK Signal: Available for all outputs.
Over Current Protection (OCP): Installed at each rail.
Overload Protection (OLP): Fully protected against output overload or short circuit. Typ. 120-130% max. load.
Consult the factory for special OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 80-83 %.
Switching Frequency: 120K Hz.
Circuit Topology: Forward circuit.
Transient Response: Peak transient less than 200mV and returns to within 1% less than 250µS for 25% load-change.
Safety Standard: IEC60950 Class I.
Construction: Eurocard 6U X 8HP X 160mm
CompactPCI format. Front Panel with Extractor handle.

Operating Temperature: 0 to +50 °C at full load with specified air flow. Derates linearly to 50% at +70 °C
Storage Temperature: -40 to +85 °C.
Temperature Coefficient: Typ. ±0.02% / °C.
Cooling: At least 20 cfm moving air is required to achieve full rating power 300W in a confined area.
Power Density: 2.70 Watts/ Cubic Inch.

Remark: All measurements are at nominal input, full load and +25°C unless otherwise specifications.

OUTPUT VOLTAGE/CURRENT RATINGS CHART

QUAD OUTPUT

MODEL NO.	MAIN +VO1 @*#≡♣				AUX. +VO2 ▲@*#≡♣				AUX. +VO3 ▲≡#♦♣@					AUX. -VO4 ♦*♣				
	Min.	Typ.	Volt.	Max.	Min.	Typ.	Volt.	Max.	Min.	Typ.	Volt.	Max.	Pk.	Min.	Typ.	Volt.	Max.	Pk.
APS300ACP-490	2A	20A	+5V	35A	0A	20A	+3.3V	25A	0A	10A	+12V	12A	15A	0A	0.8A	-12V	1A	1.5A

Symbol: "*" OVP built-in. "@" Adjustable. "#" Remote sensing. "≡" 3rd-wire Load Sharing.

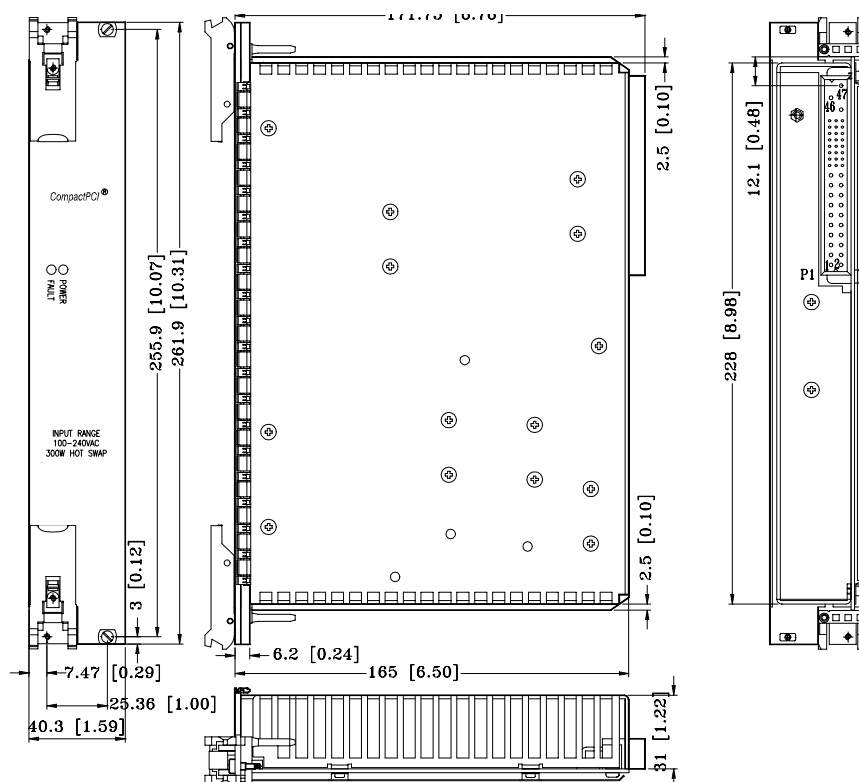
"♣" Installed with Or-ing diode. "▲" Magnetic Amplifier. "♦" Installed with Post-regulator. "■" Common Choke.

Remark: Peak load less than 60sec. with duty cycle <10%.

Max. load is the continuous operating load of each rail. But the max. load of each rail can't be drawn from all outputs at the same time.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 1.7kg (3.75 lb.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

	AC INPUT			QUAD OUTPUT													STATUS/CONTROL				
ASSIGNMENT	L	N	G	VO1	S+	S-	Adj.	C.S.	VO2	S+	Adj.	C.S.	VO3	S+	C.S.	VO4	DC COM	EN#	DEG#	INH#	FAL#
CNTR & PIN #	47	46	45	1,2,3,4	30	34	29	35	13,14,15,16,17,18	33	32	41	20	36	44	21	5,6,7,8,9,10,11,12,19,24	27	38	39	42

Mating connector: PCIH47F400A1.