



**Universal AC input harmonic correction AC-DC hot-swappable
CompactPCI Serial Dual output (with 5V standby) 312 Watts
active current sharing switching power supplies HAC300S-D120E**



Features

- 3U x 8HP CompactPCI Serial
- Wide operating temperature -40°C to +70°C
- IEC61000-3-2 harmonic correction
- N+1 redundancy, hot-swappable & active current sharing
- 80 plus gold efficiency
- PMBus communication
- Fully compliant with PICMG



Specification

Input

Input Voltage	Typical 90-264VAC
Input Frequency	47-63Hz
Input Current	Typical 3A at 115VAC Typical 1.5A at 230VAC
Inrush Current	5.3Arms at 230VAC
Power Factor	Typical 0.98-0.99
Input Connector	FCI 51939-667LF
Earth Leakage Current	Less than 0.7mA at 230VAC

Output

Output Connector	FCI 51939-667LF
Line Regulation	Typical 1%
Load Regulation	V1 typical $\pm 1\%$, V2 typical $\pm 5\%$
Total Regulation	V1 typical $\pm 2\%$, V2 typical $\pm 5\%$
Noise & Ripple	Typical 1% peak to peak
Remote Sense	Available for V1
Adjustability	Available for V1
Hold-up Time	Typical 18mS (@95%)
Current Sharing	Active current sharing at V1

Protection

Over Voltage	Built-in
Over Current	Installed
Over Load	Typical 120-130% peak current at 115VAC
Over Temperature	Installed NTC and thermostat for thermal sensor at [DEG#] pin

General

Efficiency	Typical 90% at 230VAC
Switching Frequency	Typ 85-100KHz
Dielectric Withstand	IEC62368-1 regulation
Transient Response	The Peak deviation less than 134mV, and the output shall recover to regulation limits following a 25% load step-change
Remote ON/OFF	Available
Power Fail Signal	Available at [FAL#] pin

DC OK

Status LED	Available for V1 & +5Vsb(V2) <Green> means valid input voltage <Red> means a critical fault <Green> means DC OK
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N+1 Redundancy

Hot-Swappable	Internal OR-ing diodes
Power Density	Available
PMBus interface	5.7 Watts/Cubic Inch

Environmental

Operating Temperature	-40°C to +70°C derate linearly (see note 3) (Refer to derating curve)
Storage Temperature	from 100% power at +50°C to 60% power at +70°C -45°C to +85 °C

Cooling

Safety/EMC

Emissions (conducted)	200 LFM moving air
Harmonic Current	EN55032, FCC Class B
Safety Standard	IEC61000-3-2 IEC62368-1 Class I

Notes:

- (1)All measurement are at nominal input, full load and +25°C unless otherwise specifications.
- (2)Due to requests in market and advances in technology, specifications subject to change without notification.
- (3)A warm-up time 10 minutes is required after cold start at temperature from -40°C to +0°C.
- (4)Tantalum capacitors connected to system is suggested for bettering Ripple & Noise against operating temperature from -40°C to +0°C.
- (5)125°C OS-CON Long-life Solid capacitors are installed in secondary circuits.

Output voltage & current rating chart

Dual output

Model No.	V1★@≡○					STANDBY V2★○				
	Min.	Typ.	Volt.	Max.	Peak	Min.	Typ.	Volt.	Max	Peak
HAC300S-D120E	0A/0.5A	25A	12V	25A	28A	0.1A	2.5A	5V	2.5A	3A

Symbol: "★" OVP built-in. "@" Adjustable. "#" Remote sensing. "≡" Active Load Sharing. "○" Installed with Or-ing diode.

Notes: (1) Peak load less than 60sec. with duty cycle <10%.

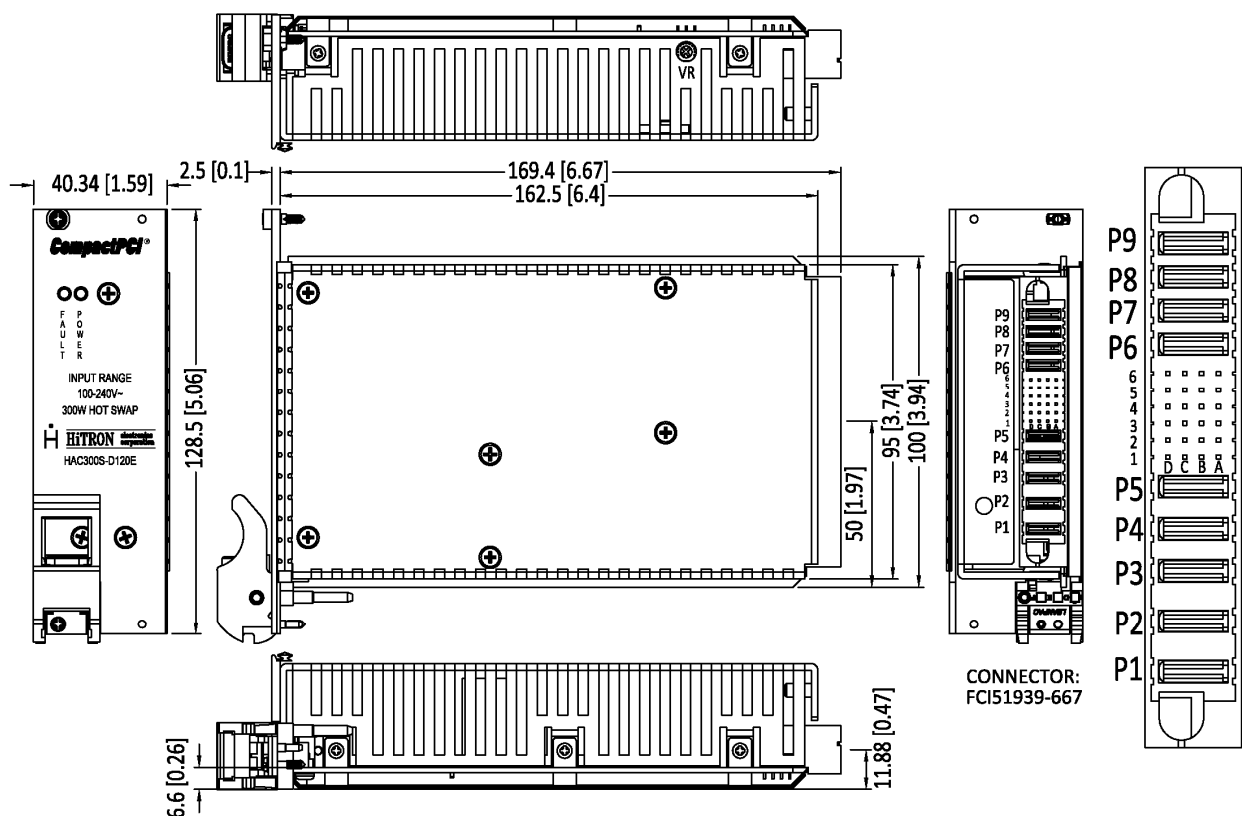
(2) Maximum load is the continuous operating load of each rail, but the maximum load of each rail can't be drawn from all outputs at the same time.

(3) Please consult the factory if you have the special min load request of V1.

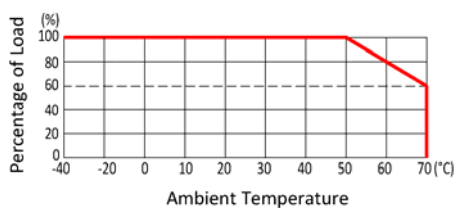
(4) Min. load is only requested when PSUs do run in parallel.

Mechanical Dimensions (All dimensions are in mm[inch])

Weight: 710.0 g (25.1 Oz.)



Derating Chart



Pin Assignment

P1	P2	P3	P4	P5	D1	D2	D3	D4	D5	D6	P6	P7	P8	P9
L	N	G	N/A	N/A	N/A	FAL	PS_P	COM	DEG	5Vsb	COM	COM	V1	V1
					C1	C2	C3	C4	C5	C6				
					N/A	N/A	COM	A0	ALERT	5Vsb				
					B1	B2	B3	B4	B5	B6				
					N/A	12VCS	PSON	A1	SCL	COM				
					A1	A2	A3	A4	A5	A6				
					N/A	-VS	+VS	A2	SDA	EN				

Notes: The mating connector is FCI 51940-350LF.



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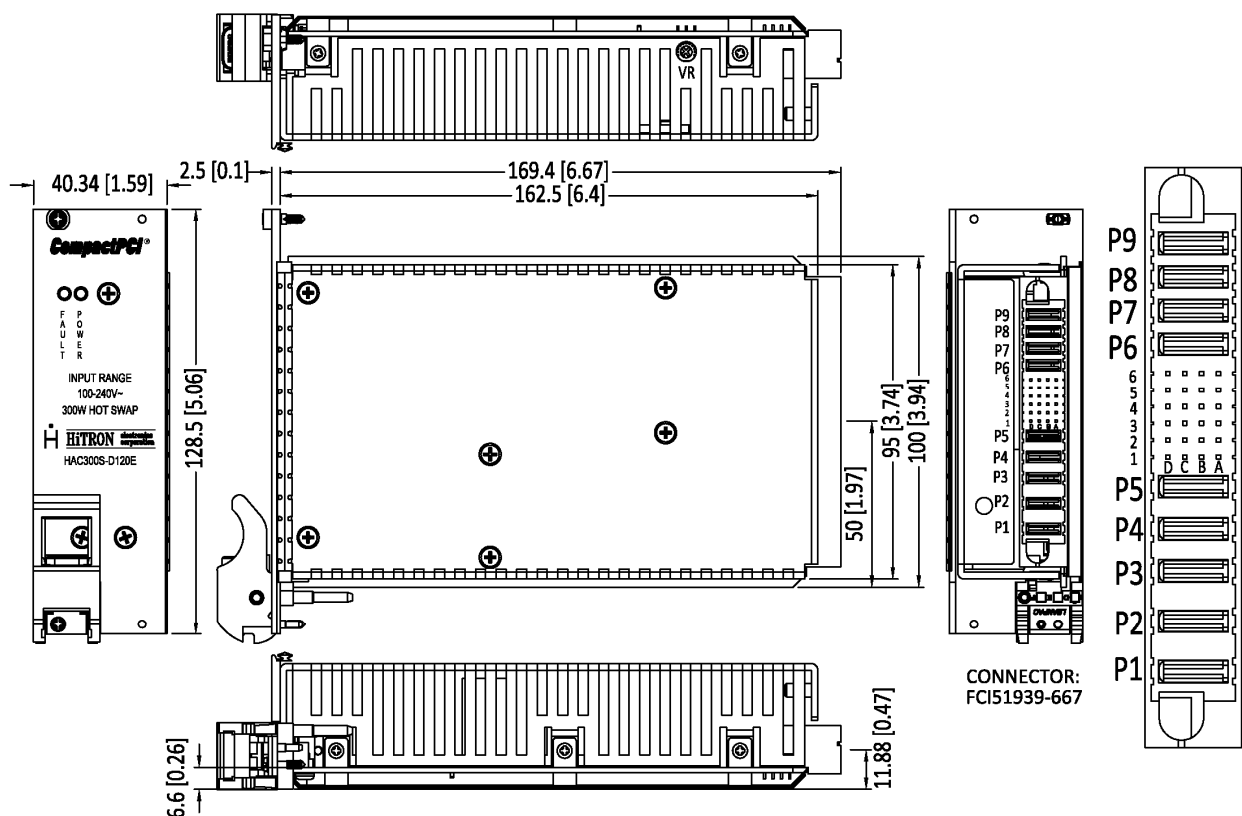
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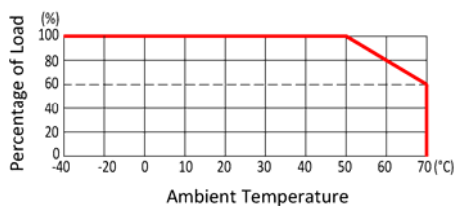
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