



**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		General	
Input Voltage	Typical 90-264VAC	Switching Frequency	Typ 85-100KHz
Input Frequency	47-63Hz	Dielectric Withstand	IEC62368-1 regulation
Input Current	Typical 3A at 115VAC Typical 1.5A at 230VAC	Transient Response	The Peak deviation less than 134mV, and the output shall recover to regulation limits following a 25% load step-change
Inrush Current	5.3Arms at 230VAC	Remote ON/OFF	Available
Power Factor	Typical 0.98-0.99	Power Fail Signal	Available at [FAL#] pin
Input Connector	FCI 51939-667LF	DC OK	Available for V1 & +5Vsb(V2)
Earth Leakage Current	Less than 0.7mA at 230VAC	Power LED	Green: valid AC input voltage
Output		Fault LED	Green: DC OK Red: AC input < 90Vac Red flash: critical fault
Output Connector	FCI 51939-667LF	N+1 Redundancy	Internal OR-ing diodes
Line Regulation	Typical 1%	Hot-Swappable	Available
Load Regulation	V1 typical $\pm 1\%$, V2 typical $\pm 5\%$	Power Density	5.7 Watts/Cubic Inch
Total Regulation	V1 typical $\pm 2\%$, V2 typical $\pm 5\%$	PMBus interface	Available
Noise & Ripple	Typical 1% peak to peak	Environmental	
Remote Sense	Available for V1	Operating Temperature	-40°C to +70°C derate linearly (see note 3)
Adjustability	Available for V1		(Refer to derating curve)
Hold-up Time	Typical 18mS (@95%)	Storage Temperature	-45°C to +85 °C
Current Sharing	Active current sharing at V1	Cooling	200 LFM moving air
Protection		Safety/EMC	
Over Voltage	Built-in	Emissions (conducted)	EN55032, FCC Class B
Over Current	Installed	Harmonic Current	IEC61000-3-2
Over Load	Typical 120-130% peak current at 115VAC	Safety Standard	IEC62368-1 Class I
Over Temperature	Installed NTC and thermostat for thermal sensor at [DEG#] pin		
General			
Efficiency	Typical 90% at 230VAC		

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%.

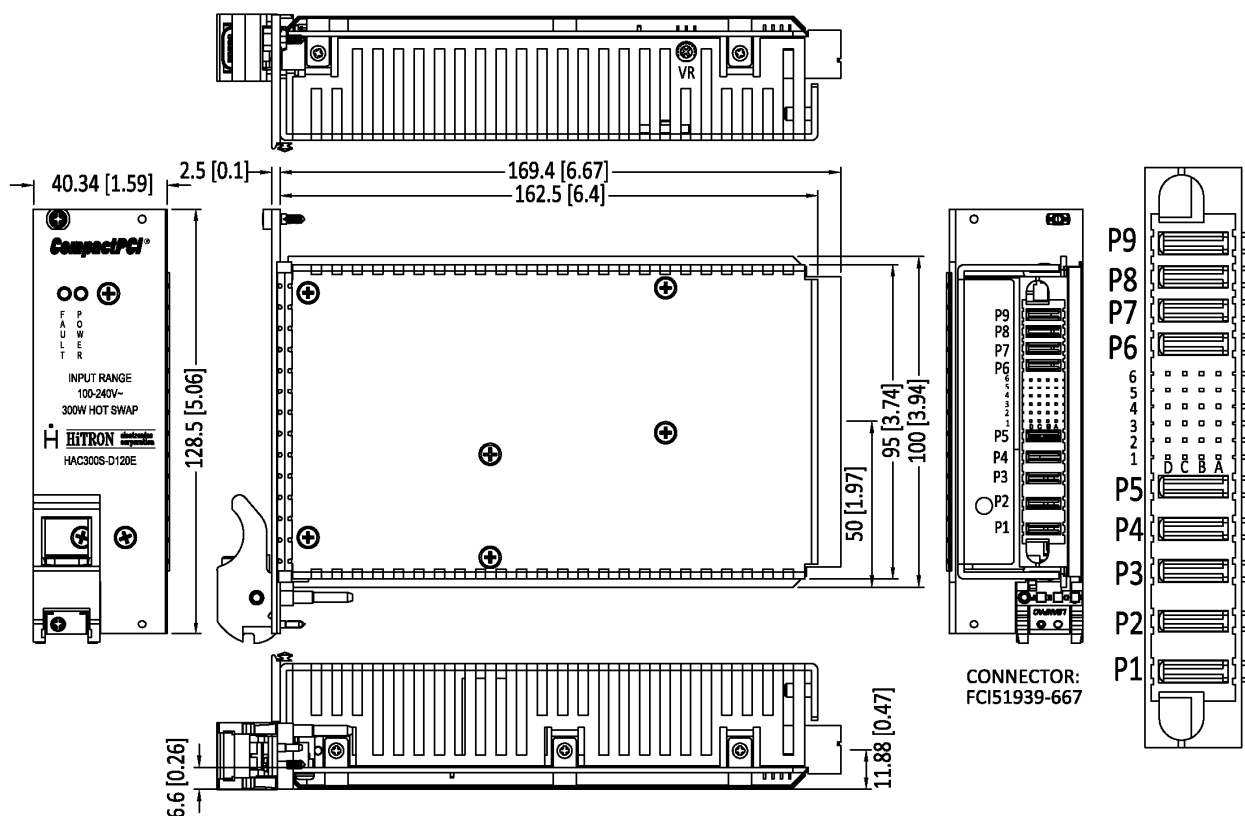
(2) Maximum load is the continuous operating load of each rail, but the maximum load of each rail can't be drawn from all outputs at the same time.

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

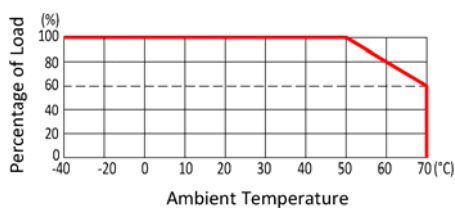
(4) Min. load is only requested when PSUs do run in parallel.

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	PS0N	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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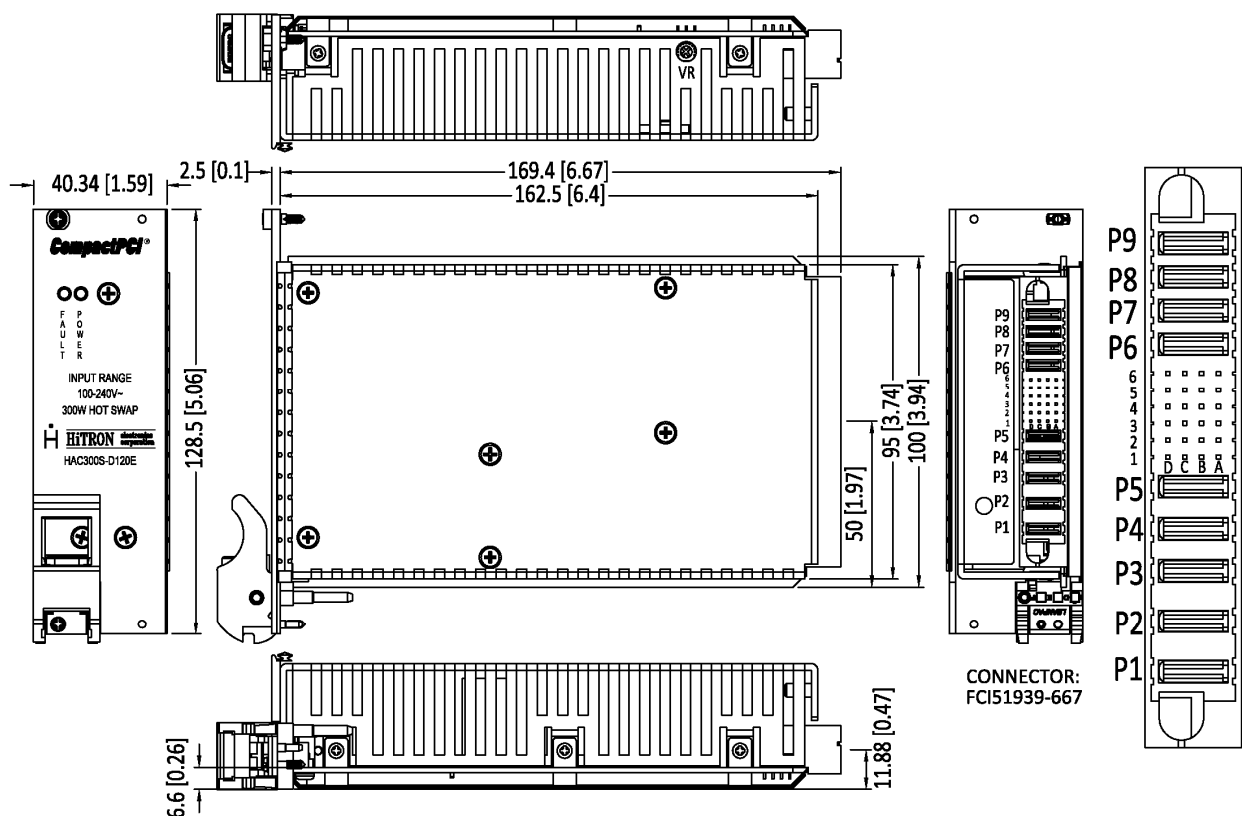
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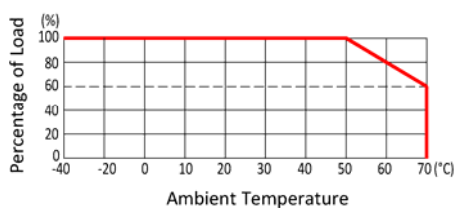
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					C1	C2	C3	C4	C5	C6				
					N/A	ALERT	COM	A0	N/A	5Vsb				
					B1	B2	B3	B4	B5	B6				
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