

SERIES: PSE-850 | **DESCRIPTION:** AC-DC HOT-SWAP POWER SUPPLY

FEATURES

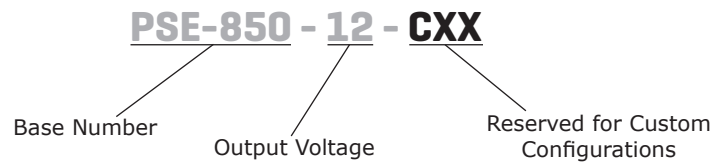
- up to 850 W continuous power
- 1U x 2U package
- I²C communication for monitoring and control
- front panel IEC-320/C14 inlet
- redundant (N+1) operation
- blind mate connections for hot-swap
- power factor correction
- 3.3 Vdc (1A) standby voltage
- DROOP current sharing
- remote on/off control, power good signal
- efficiency up to 89%



MODEL	output voltage	output current max	output power max	ripple and noise max	efficiency ¹
	(Vdc)	(A)	(W)	(mVp-p)	typ (%)
PSE-850-12	12	71	850	120	89

Notes: 1. At 230 Vac input, 50% load.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		50		60	Hz
current	at 90 Vac			12	A
inrush current	at 230 Vac, cold start, 25°C			20	A
leakage current				1.5	mArms
power factor correction		0.95	0.99		

OUTPUT - V1 (MAIN OUTPUT)

parameter	conditions/description	min	typ	max	units
total regulation			±3		%
transient response	25% step load, recovery to 1% within 1 ms			2	%
start-up time	monotonic start-up <150 ms			5	s
hold-up time	at 115 Vac, full load	12			ms

OUTPUT - V2 (STANDBY OUTPUT)

parameter	conditions/description	min	typ	max	units
output voltage			3.3		Vdc
output current		0		1	A
ripple and noise				50	mVp-p

STATUS & CONTROL

parameter	conditions/description	min	typ	max	units
I ² C interface					
remote sense	total drop (main output)			250	mVdc
remote ON/OFF	logic level low to enable module				
current share	slope share for main (single wire control), ±10% accuracy at >20% load passive current share for V2		300		mV
parallel operation	hot-swap, N+1 redundant				
redundant operation	integral isolation devices				
PS present	referenced to logic return				
LED indicator	AC OK: open collector type DC OK: open collector type				
over temp. warning	open collector type				

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	V1: latch off V2: latch off			15 4	Vdc Vdc
over current protection	V1: auto recovery V2: zener diode/foldback	110		135 3.5	% A
over temperature protection	output shut down, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
safety approvals	cTUVus UL60950-1 (pending), CE (pending)				
emissions	FCC 15 Sub Part J, Class A, EN55022 Class A				
harmonic compliance	EN61000-3-2:2009 Class A				

SAFETY & COMPLIANCE (CONTINUED)

parameter	conditions/description	min	typ	max	units
surges (mains)	IEC/EN 61000-4-5				
voltage dips/interruptions	IEC/EN 61000-4-11				
RoHS	2011/65/EU				

ENVIRONMENTAL

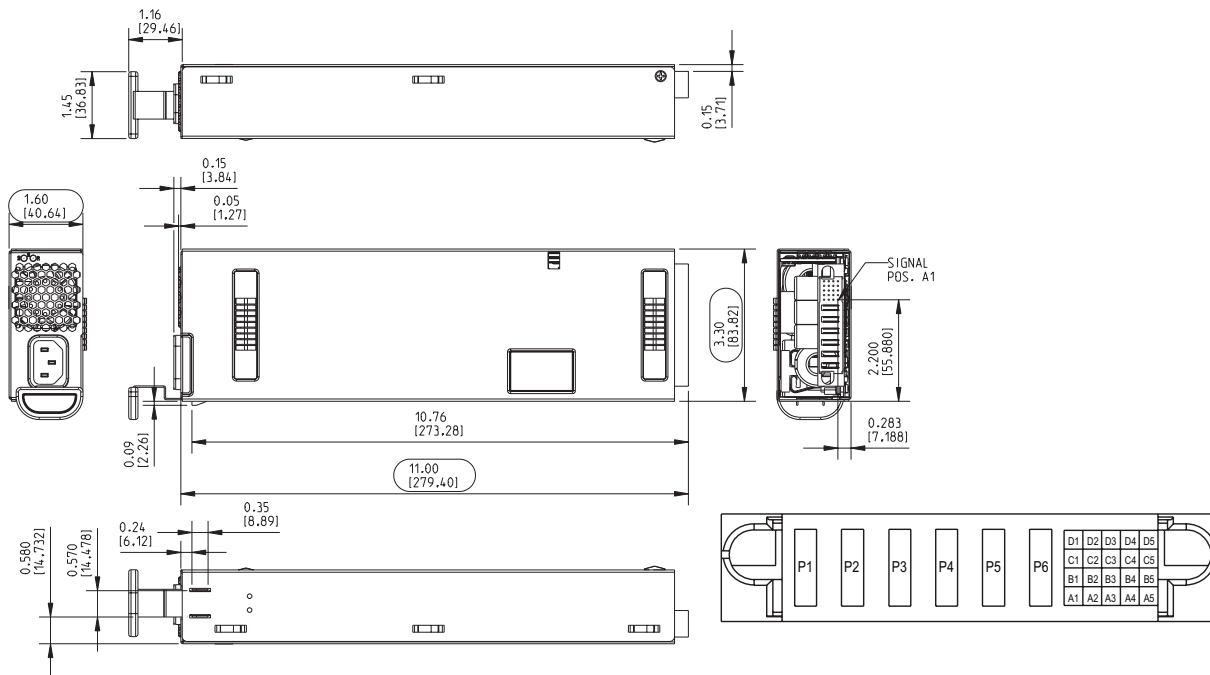
parameter	conditions/description	min	typ	max	units
operating temperature	at 90~132 Vac at 180~264 Vac	0		45	°C
		0		50	°C
storage temperature		-40		85	°C

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	11.00 x 3.30 x 1.60 (279.4 x 83.8 x 40.6 mm)				inches
cooling / airflow	air flow from internal ball bearing fan, faceplate to DC connector directional airflow				
AC input	IEC320/C14				
DC output	FCI P/N 51732-020LF mates with FCI P/N 51762-10602000AALF				

MECHANICAL DRAWING

units: inches [mm]
tolerance:
X.XX ±0.02 [0.50]
X.XXX ±0.010 [0.25]



DC OUTPUT/SIGNAL CONNECTOR

Pins	Function	Pins	Function	Pins	Function	Pins	Function	Pins	Function
P1	+12 V	A1	Remote Enable	B1	A0 (I ² C)	C1	+12 V Sense	D1	OTP & Fan Fail
P2	+12 V	A2	+3.3 VSB	B2	A1 (I ² C)	C2	Sense Return	D2	Reserved
P3	+12 V	A3	3.3 VSB Return	B3	A2 (I ² C)	C3	N/A	D3	Signal Return
P4	-12 V	A4	AC OK	B4	SDA (I ² C)	C4	N/A	D4	DC OK
P5	-12 V	A5	N/C	B5	SCL (I ² C)	C5	Current Share	D5	PS Present
P6	-12 V	--	--	--	--	--	--	--	--

REVISION HISTORY

rev.	description	date
1.0	initial release	05/06/2015

The revision history provided is for informational purposes only and is believed to be accurate.



Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.