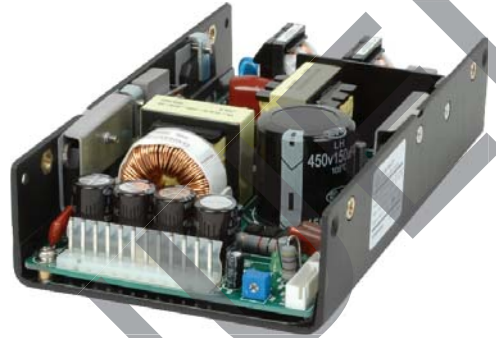


**SERIES:** VPU-S200 | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

- up to 200 W continuous power
- U-Frame
- universal input (85-264 Vac / 120-340 Vdc)
- 12V fan drive
- single output from 3.3 to 48 V
- active power correction
- remote on/off
- power good signal
- remote sense
- short circuit, over voltage, over load, and over current protections
- UL/cUL and TUV safety approvals
- efficiency up to 81%



MODEL	output voltage	output current	output power	ripple and noise	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VPU-S200-3.3	3.3	30	73	60	75
VPU-S200-5	5	30	150	60	75
VPU-S200-12	12	16.7	200	120	75
VPU-S200-15	15	13.3	200	150	78
VPU-S200-24	24	8.3	200	240	81
VPU-S200-36	36	5.5	200	360	81
VPU-S200-48	48	4.2	200	480	81

**PART NUMBER KEY**
**VPU-S200 - XX - X**

Base Number

Output Voltage

 Power Fail Detect  
 "Blank" = No  
 P = Yes

**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		85		264	Vac
		120		340	Vdc
frequency		47		63	Hz
current	at 115 Vac, full load			1.4	A
	at 230 Vac, full load			0.7	A
inrush current	at 115 Vac, 25°C, full load, cold start			20	A
	at 230 Vac, 25°C, full load, cold start			40	A
power factor	at 100 Vac, full load		.99		
	at 200 Vac, full load		.95		

**OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	full load		0.5	1	%
load regulation	at 230 Vac		3	5	%
temperature coefficient	all output		±0.05		%/°C
transient response	full load to half load at 100 Vac			4	ms
adjustability	Adjustable with built-in trim pot			±10	%
switching frequency			100		KHz
start-up time	full load at 100 Vac			0.5	s
hold-up time	full load at 110 Vac	20			ms

**PROTECTIONS**

parameter	conditions/description	min	typ	max	units
overload protection	recovers automatically	105			%
over voltage protection		115		140	%
short circuit protection	Protected, long term short circuit may reduce reliability				
over current protection	recovers automatically	105			%

**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	Primary to secondary:	4242			Vdc
	Primary to transformer core:	2000			Vac
	Primary to earth ground:	2000			Vac
isolation resistance	test voltage of 500 Vdc	50			MΩ
safety approvals	UL/cUL 60950, TUV EN60950, CE, CB				
EMI/EMC	FCC class B, EN55022 class B				
leakage current	full load at 240 Vac			1.5	mA
MTBF	MIL-HDSK-217F, 25°C ambient	450,000			hrs
RoHS	2011/65/EU				

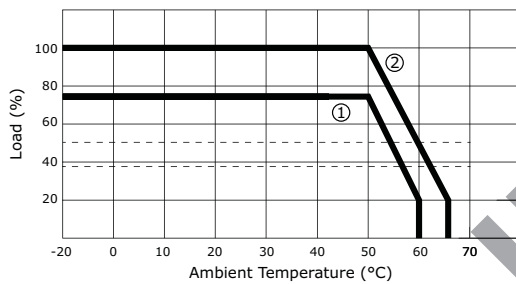
## ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
vibration	(10 ~ 55 Hz, 1 hour per axis, 3 hours total)		2		G
operating temperature		-10		65	°C
storage temperature		-20		75	°C
operating humidity	non-condensing	20		90	%
storage humidity	non-condensing	0		75	%

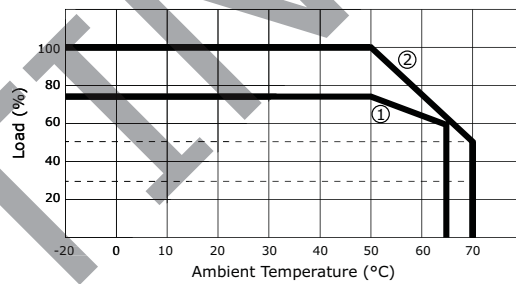
## DERATING CURVES

output power vs. ambient temperature

a. 3.3 and 5 V models



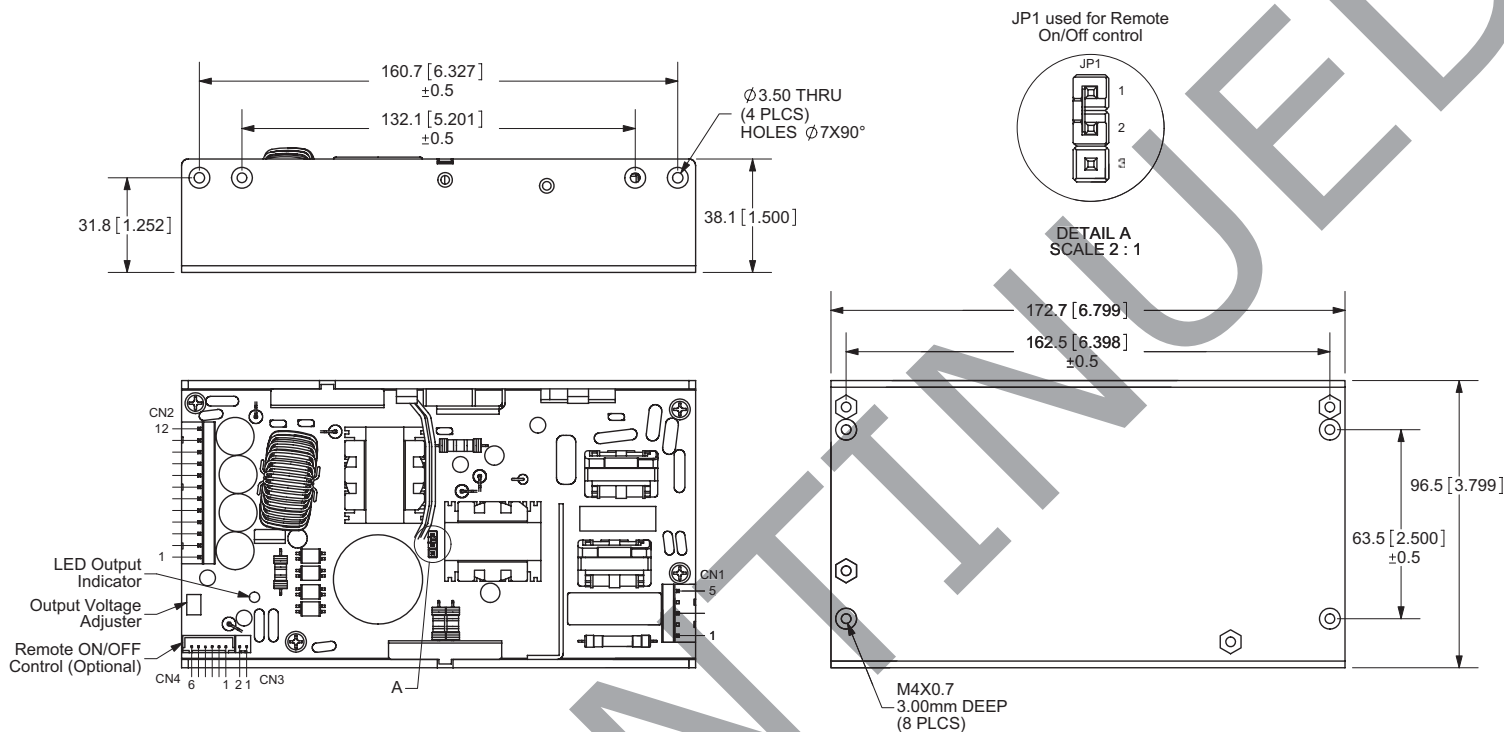
b. all other models



- ① Convection
- ② Forced air (0.5m<sup>3</sup>/min)  
18 CFM

## MECHANICAL DRAWING

units: mm[inches]  
tolerance: ±0.2mm



CN1		CN2		CN3		CN4	
1	N	1	-Vo	1	FAN+	1	RTN
2	n/c	2	-Vo	2	FAN-	2	on/off
3	L	3	-Vo			3	PG
4	n/c	4	-Vo			4	RTN
5	FG	5	-Vo			5	RS+
		6	-Vo			6	RS-
		7	+Vo				
		8	+Vo				
		9	+Vo				
		10	+Vo				
		11	+Vo				
		12	+Vo				

RTN: Return terminals for logic signals.  
Same electrical potential as -Vo.  
RS+: Remote Sense positive terminals.  
RS-: Remote Sense negative terminals.  
PG: Power good signal.

## REVISION HISTORY

rev.	description	date
1.0	initial release	01/30/2006
1.01	new template applied	12/19/2011
1.02	V-Infinity branding removed	08/22/2012
1.03	corrected output power data	10/12/2012
1.04	updated isolation voltage	01/08/2014

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



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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.