



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**SERIES:** VSCP-800 | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

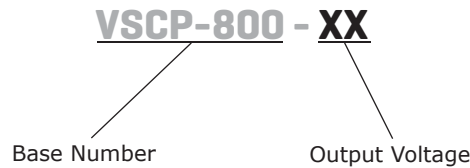
- up to 800 W continuous power
- universal input (90~260 Vac / 130~370 Vdc)
- single output from 9~60 V
- programmable output voltage
- active power correction (98%)
- current sharing capable
- power good, remote sense, remote on/off control
- built-in DC fan
- over load, over voltage, over temperature, and short circuit protections
- UL and TUV safety approvals
- efficiency up to 90%



MODEL	output voltage <sup>1</sup>	output current <sup>2</sup>	output power	ripple and noise <sup>3</sup>	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VSCP-800-09	9	44 / 88	800	90	83
VSCP-800-12	12	33 / 66	800	120	84
VSCP-800-15	15	26 / 53	800	150	85
VSCP-800-18	18	22 / 44.4	800	180	85
VSCP-800-24	24	16 / 33	800	240	88
VSCP-800-36	36	11 / 22.2	800	360	88
VSCP-800-48	48	8 / 16	800	480	89
VSCP-800-60	60	6 / 13	800	600	90

Notes: 1. output voltage is measured at output power connector  
 2. maximum current is measured at 100~120 V input / 200~240 V input  
 3. ripple and noise is measured from 10 KHz to 20 MHz at output terminals with 0.1 μF ceramic capacitor and a 22 μF electrolytic capacitor in parallel

**PART NUMBER KEY**



**INPUT**

parameter	conditions/description	min	typ	max	units
voltage	100 ~ 120 / 200 ~ 240 Vac (see derating curve)	100		240	Vac
	130 ~ 185 / 260 ~ 370 Vdc (see derating curve)	130		370	Vdc
frequency		47		63	Hz
current	at 90-264 Vac, full load			4.5	A
inrush current	peak measured at 230 Vac, cold start			60	A
power factor correction	at 230 Vac, full load			0.98	

**OUTPUT**

parameter	conditions/description	min	typ	max	units
temperature coefficient	0 ~ 50°C		±0.04		%/°C
hold-up time	230 Vac at full load			12	ms
adjustability	adjustable with built-in trim pot, 25 ~ 100% adjustment by 1 ~ 5 Vdc external control		±7.5		%
programming	output voltage programmable through external 0 ~ 5 V control voltage on VCI. Control voltage can also be obtained from VCO via a 470 KΩ pot. see application diagrams	25		100	%
remote sense	Designated as (VS+) and (VS-). Total voltage compensation from cable losses with respect to the main output.				
remote inhibit	Designated as (INH), requires a low signal to inhibit the output.				
current sharing	Designated as (PAR), use in parallel for forced current sharing function.				

**PROTECTION**

parameter	conditions/description	min	typ	max	units
over voltage protection		110		135	%
over current protection <sup>4</sup>	current limiting 3 times with auto recovery before shutdown				

Notes: 4. Protection mode sends a pulse, waits 1.5 seconds, sends second pulse, waits 3 seconds, sends third pulse, waits 5 seconds. If overload is still present, the unit will shutdown.

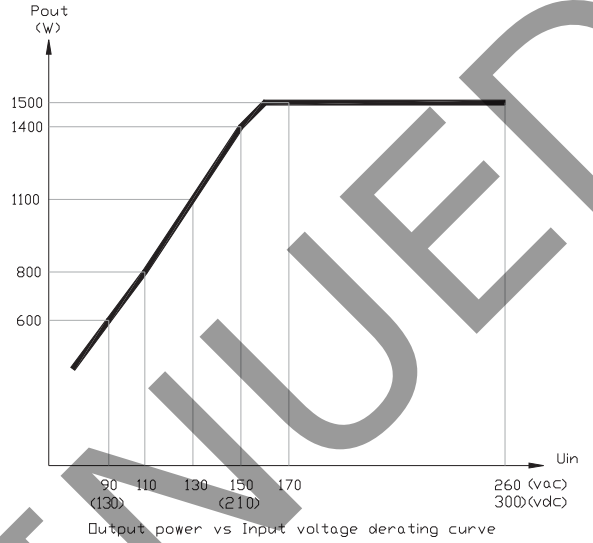
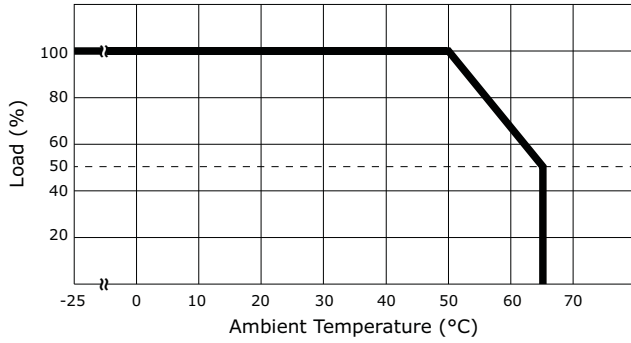
**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
safety approvals	TUV EN60950, UL/cUL 1950				
EMI/EMC	EN 55022, EN 61000-4-(2,3,4,5,6,8,11), EN 61000-3-(2,3), ENV50204				
leakage current	at 240 Vac			3.5	mA
RoHS compliant	yes				

**ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-20		85	°C
operating humidity		20		90	%
storage humidity		10		95	%
vibration	for 60 minutes, each axis	10		200	Hz

## DERATING CURVES

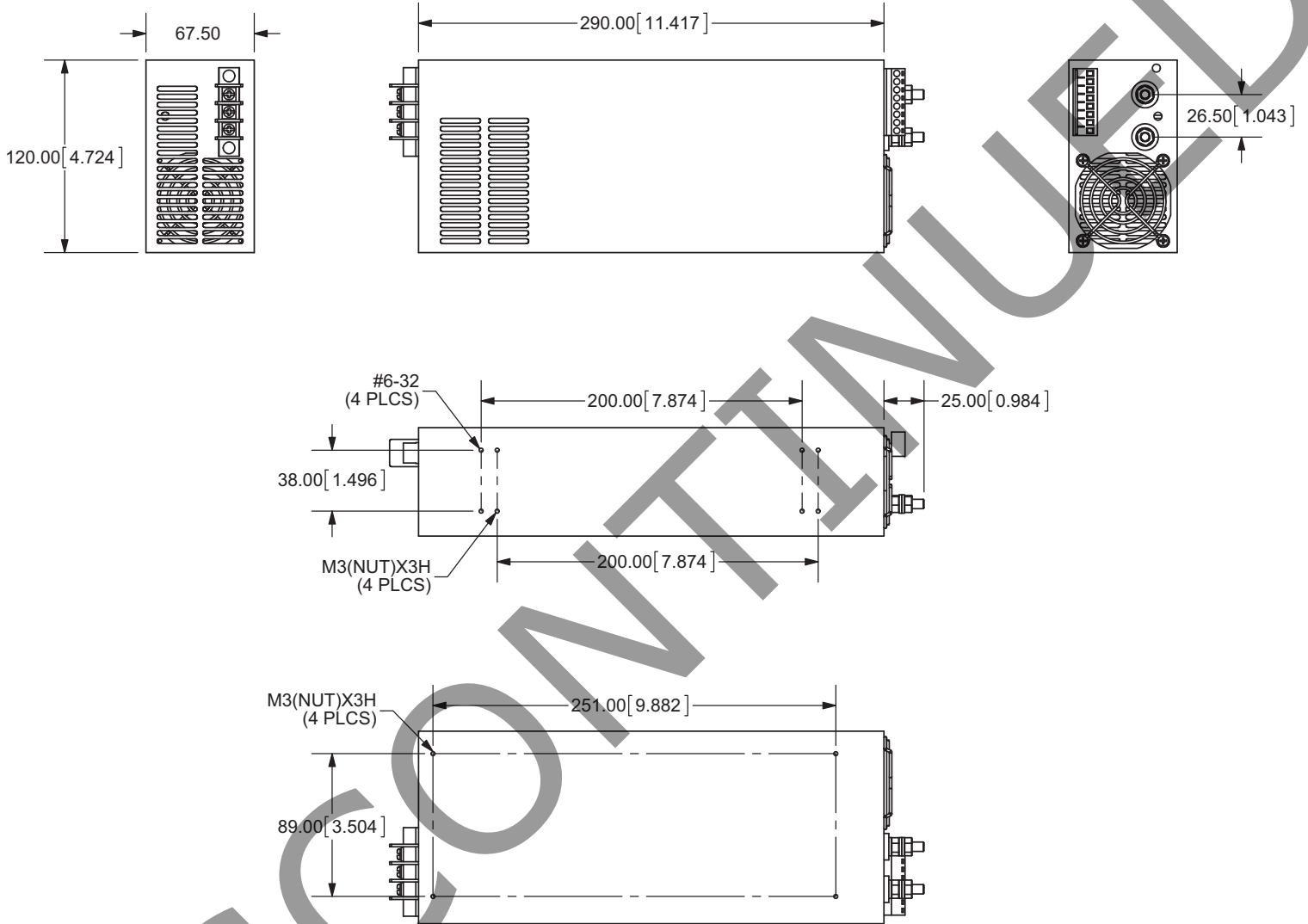


## MECHANICAL

parameter	conditions/description	min	typ	max	units
weight			4.5		Kg
enclosure	11.42 x 4.72 x 2.66 inches (290 x 120 x 67.5mm)				mm

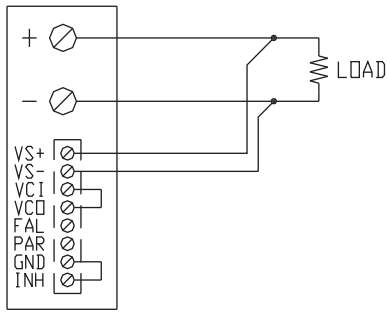
## MECHANICAL DRAWING

tolerance:  $\pm 1.0\text{mm}$  unless otherwise specified

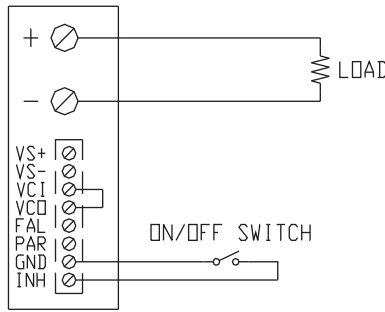


LOGIC CONNECTOR		
1	VS+	output voltage remote sense+
2	VS-	output voltage remote sense-
3	VCI	command input voltage for output programming
4	VCO	5~10 Vdc reference for output programming
5	FAL	power failure detected
6	PG	power good signal
7	PAR	current sharing / parallel function
8	GND	return / output ground
9	INH	inhibit / remote on-off

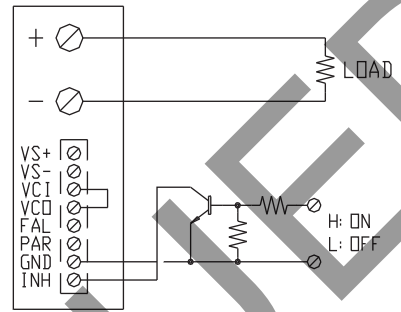
## LOGIC CONNECTIONS



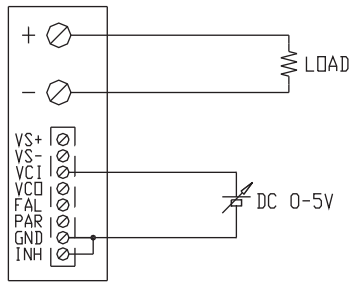
REMOTE SENSING



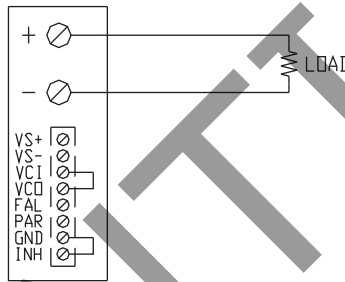
ON/OFF CONTROL BY SWITCH



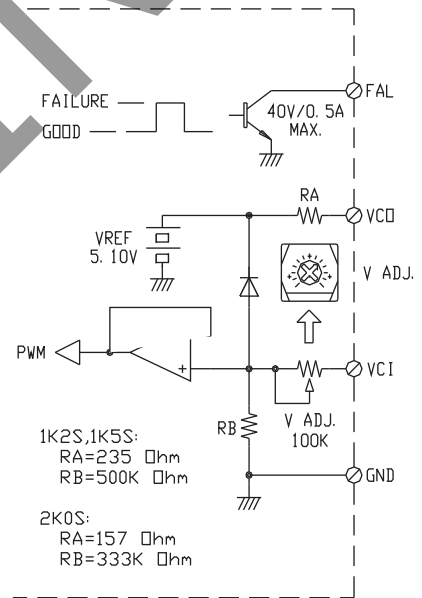
ON/OFF CONTROL BY TRANSISTOR



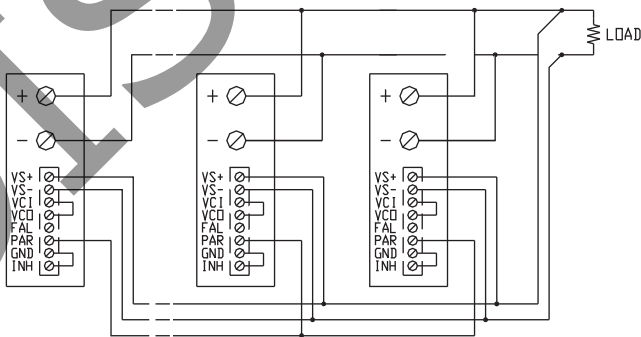
OUTPUT VOLTAGE ADJUST WITH DC 0-5V



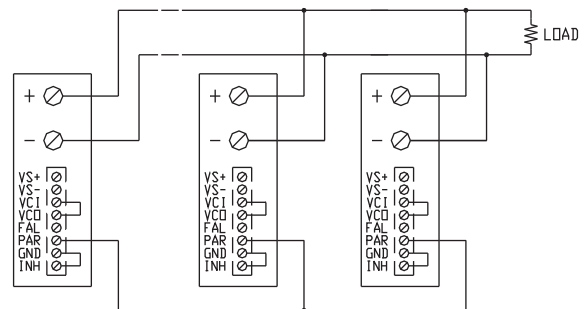
USING INTERNAL VOLTAGE CONTROL



VCI AND VCD SIGNAL



PARALLEL OPERATION WITH REMOTE SENSING



PARALLEL OPERATION WITHOUT REMOTE SENSING

## REVISION HISTORY

rev.	description	date
1.0	initial release	08/20/2007
1.01	new template applied	12/22/2011
1.02	V-Infinity branding removed	08/23/2012

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.