

date 07/22/2013

page 1 of 4

#### SERIES: VMS-60 **DESCRIPTION:** AC-DC POWER SUPPLY

#### **FEATURES**

- up to 60 W continuous power
- industry standard 2" x 4" footprint
- universal input (90 ~ 264 Vac)
- single output from 5 to 48 V
- no load power < 0.5W
- · over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 90%





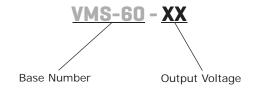




MODEL	output voltage	output current	output power	ripple and noise <sup>1</sup>	efficiency <sup>2</sup>
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	<b>typ</b> (%)
VMS-60-5	5	8	40	50	82
VMS-60-12	12	5	60	120	87
VMS-60-15	15	4	60	150	88
VMS-60-24	24	2.5	60	240	89
VMS-60-48	48	1.25	60	480	90

2. Measured at full load, 230 Vac, and 25°C

#### **PART NUMBER KEY**



<sup>1.</sup> Measured at 20MHz, with 0.1uF ceramic and 10uF electrolytic capacitors.

## **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
input current	at 100 Vac			1.6	А
	at 240 Vac			0.8	Α
inrush current	at 240 Vac			75	Α

## **OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	low line to high line, full load		±0.5		%
load regulation	10% to 100% full load		±1		%
hold-up time	115 Vac		16		ms
adjustability				±5	%
switching frequency			65		KHz

# **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	TVS component to clamp				
short circuit protection	hiccup mode, recovers automatically				

## **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	5,656			Vdc
safety approvals	IEC 60601-1, EN 60601-1, UL 60601-1				
EMI/EMC	EN 55011 Class B, FCC CFR 47 Part 18 EN 60	0601-1-2, EN 61000-	3-2, EN 610	00-3-3	
leakage current				0.1	mA
RoHS compliant	yes				

# **ENVIRONMENTAL**

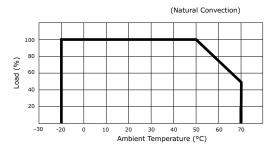
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-20		70	°C
storage temperature		-20		85	°C
operating humidity	non-condensing			93	%

# **MECHANICAL**

parameter	conditions/description	min	typ	max	units
dimensions	4.0 x 2.0 x 1.1 (101.6 x 50.8 x 27.94 mm)				inch
weight				125	g
cooling method	free air convection (see derating curves below)				

#### **DERATING CURVES**

#### output power vs. ambient temperature

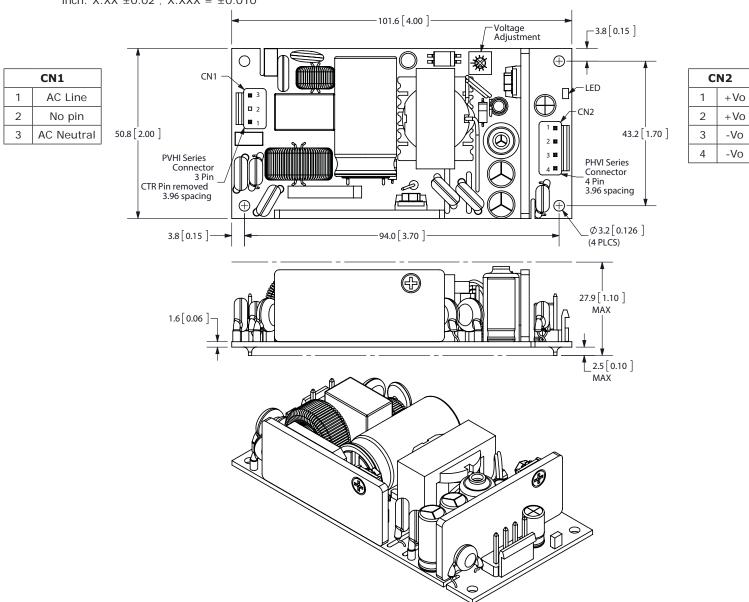


#### **MECHANICAL DRAWING**

units: mm[in]

Note:

tolerance: mm:  $X.X = \pm 0.5$ ;  $X.XX = \pm 0.25$ inch:  $X.XX \pm 0.02$ ;  $X.XXX = \pm 0.010$ 



1. All specifications measured at 25°C, 115/230Vac input voltage, and 75% load unless otherwise noted.

# **REVISION HISTORY**

rev.	description	date
1.0	initial release	10/26/2011
1.01	V-Infinity branding removed	08/27/2012
1.02	updated spec	07/22/2013

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.

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