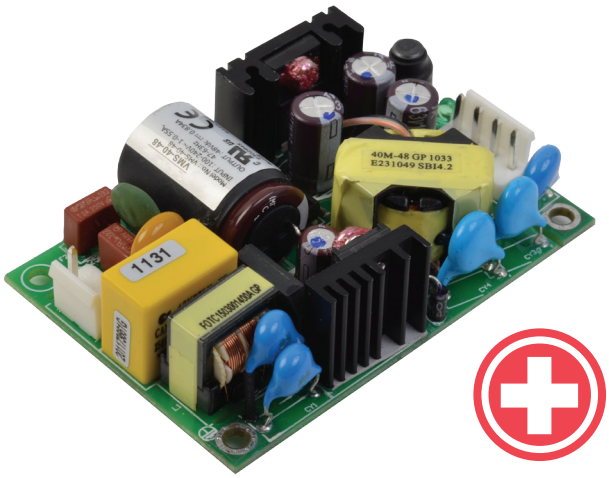
CUI INC®

SERIES: VMS-40 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

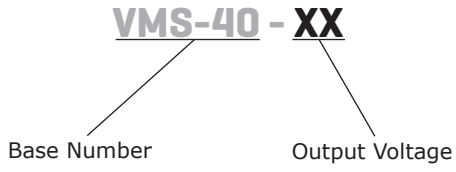
- up to 40 W continuous power
- compact size
- universal input (90~264 Vac)
- single output from 3.3~48 V
- no load power < 0.3W
- over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 88%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency[2] typ (%)
VMS-40-3.3	3.3	6	19.8	50	76
VMS-40-5	5	6	30	50	80
VMS-40-9	9	4.45	40	90	84
VMS-40-12	12	3.34	40	120	86
VMS-40-15	15	2.67	40	150	87
VMS-40-24	24	1.67	40	240	88
VMS-40-30	30	1.33	40	300	88
VMS-40-36	36	1.11	40	360	88
VMS-40-48	48	0.834	40	480	88

Notes: 1. Measured at 20MHz, with 0.1uF ceramic and 10uF electrolytic capacitors.
2. Measured at full load, 230 Vac, and 25°C

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
input current	at 100 Vac at 240 Vac			1 0.55	A A
inrush current	at 240 Vac			60	A

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		10		ms
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	UL 60601-1, EN 60601-1, IEC 60601-1, CAN/CSA-C22.2 60601-1, ANSI/AAMI ES 60601-1				
EMI/EMC	FCC CFR 47 Part 15 Subpart B, CISPR 22 Class B, EN 55011 Class B, EN 61000-3-(2, 3), IEC 61000-4-(2, 3, 4, 5, 6, 8, 11)				
leakage current				0.1	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217F, GB, at 25°C, 115 Vac	200,000			hrs

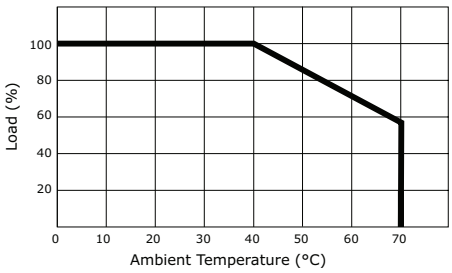
ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	0		70	°C
storage temperature		-20		85	°C
operating humidity	non-condensing			93	%

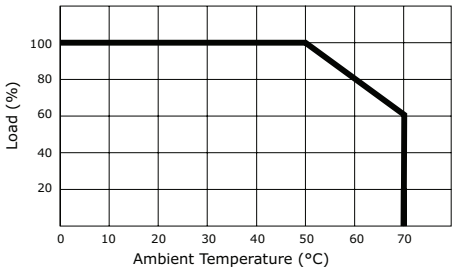
DERATING CURVES

output power vs. ambient temperature

5 V model (Natural Convection)



All other models (Natural Convection)



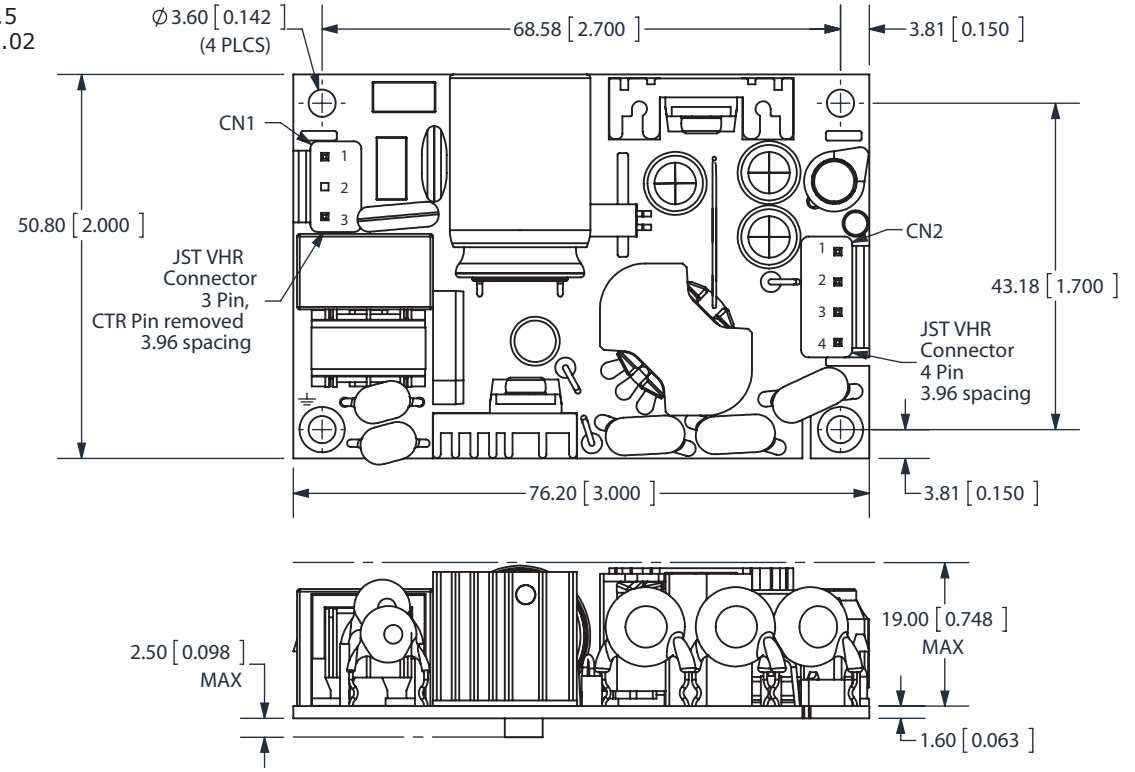
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	76.2 x 50.8 x 23.1 (3.00 x 2.00 x 0.91 inch)				mm
weight				90	g
cooling method	free air convection (see derating curves below)				

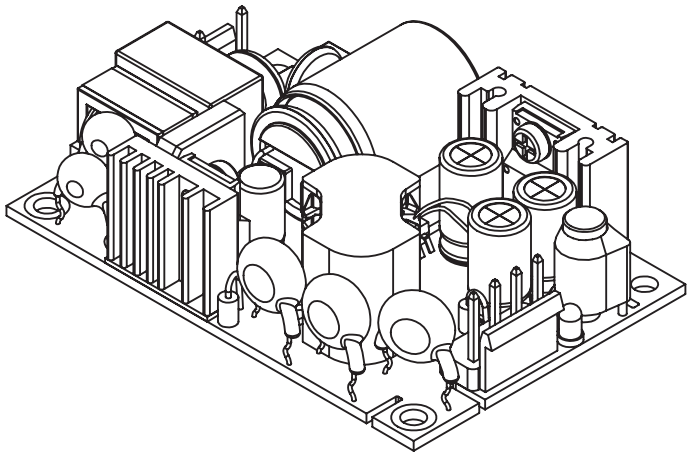
MECHANICAL DRAWING

units: mm [inch]
tolerance: mm: ±0.5
inch: ±0.02

CN1	
1	AC Line
2	No pin
3	AC Neutral



CN2	
1	+Vo
2	+Vo
3	-Vo
4	-Vo



Note: 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.

CUI INC®

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

Fax 503.612.2383
cui.com
techsupport@cui.com