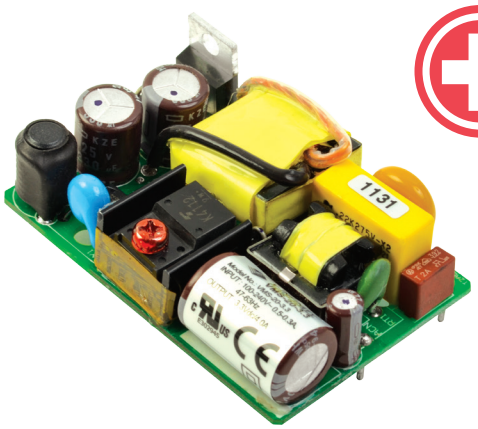
CUI INC®

SERIES: VMS-20 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

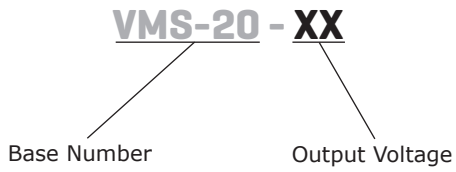
- up to 21.6 W continuous power
- compact size
- universal input (90~264 Vac)
- single output from 3.3~24 V
- no load power < 0.3W
- over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 85%



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency typ (%)
VMS-20-3.3	3.3	4.0	13.2	50	75
VMS-20-5	5	4.0	20.0	50	80
VMS-20-9	9	2.3	20.7	90	81
VMS-20-12	12	1.7	20.4	100	83
VMS-20-15	15	1.4	21.0	100	84
VMS-20-24	24	0.9	21.6	100	85

Notes: 1. Measured at 20MHz, with 0.1uF ceramic and 10uF electrolytic capacitors

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.5	A
inrush current	at 230 Vac, cold start at 25 °C			40	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			100		KHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection		115		140	%
short circuit protection	continuous				

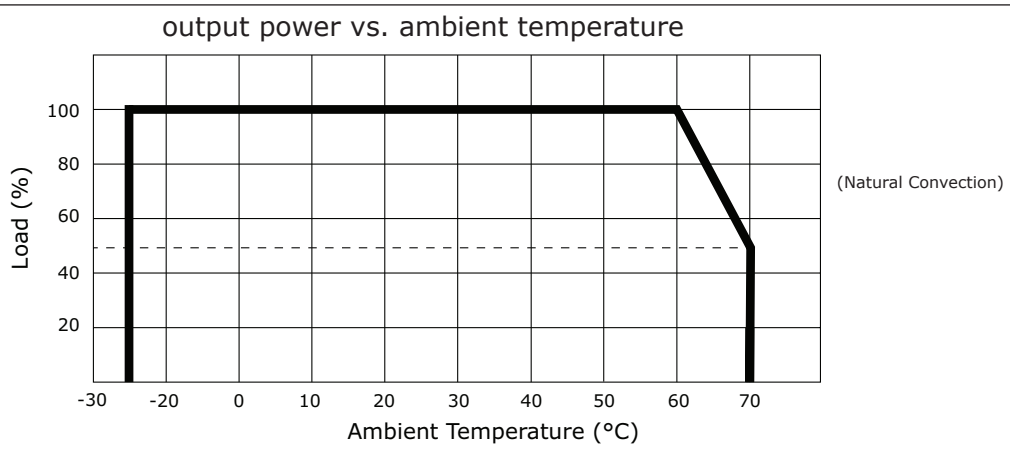
SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	5,656			Vdc
safety approvals	UL 60601-1, IEC 60601-1, EN 60601-1				
EMI/EMC	EN 60601-1/EN 61204-3/EN 55022/CISPR Class B, EN 55024				
leakage current				0.1	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217F, GB	400,000			hrs

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-25		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing			93	%

DERATING CURVE

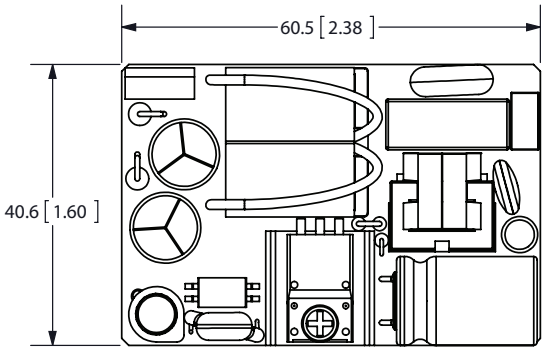


MECHANICAL

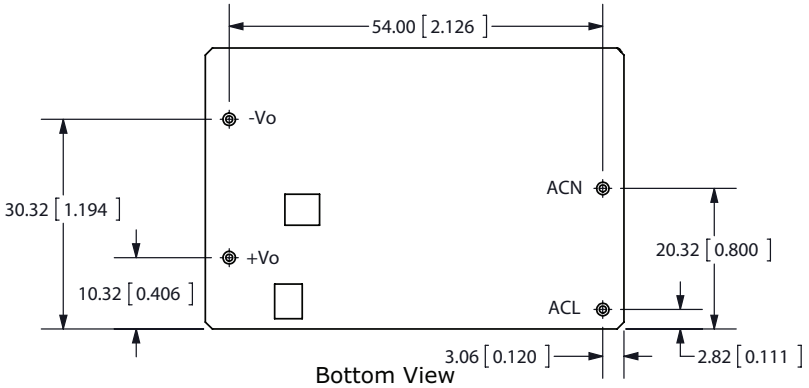
parameter	conditions/description	min	typ	max	units
dimensions	60.5 x 40.6 x 20.4 (2.382 x 1.598 x 0.803 inch)				mm
weight				50	g
cooling method	free air convection (see derating curve)				

MECHANICAL DRAWING

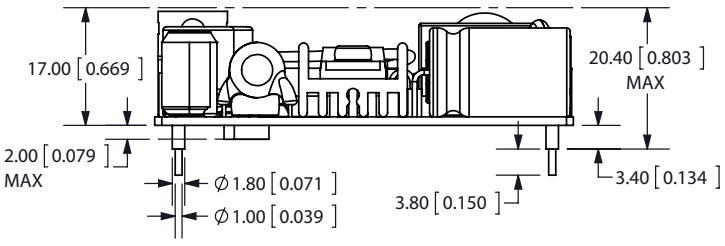
units: mm[inch]
tolerance: mm: X.X = ±0.5 ; X.XX = ±0.25
inch: X.XX = ±0.02 ; X.XXX = ±0.01



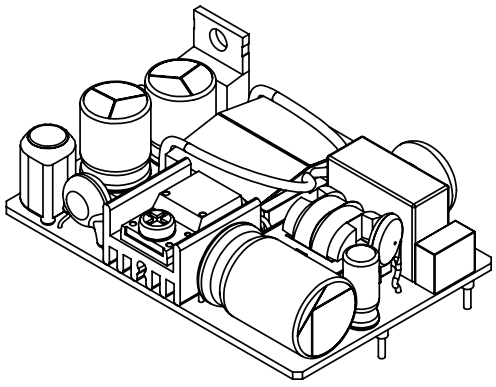
Top View



Bottom View



Front View



Note: All specifications measured at 25°C, 115/230Vac input voltage, and full load unless otherwise noted.

REVISION HISTORY

rev.	description	date
1.0	initial release	10/26/2011
1.01	V-Infinity branding removed	08/21/2012
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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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.