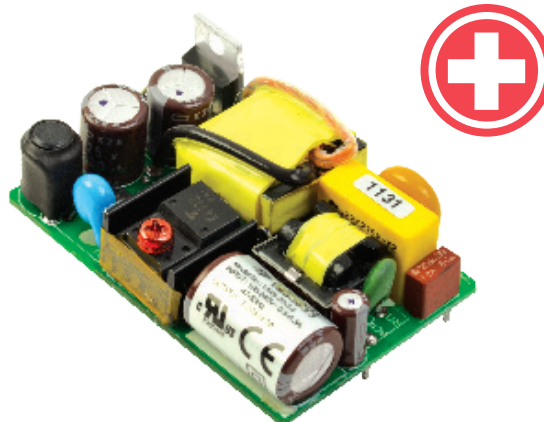


SERIES: VMS-20 | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

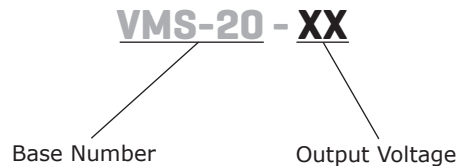
- up to 21.6 W continuous power
- compact size
- universal input (90~264 Vac)
- single output from 3.3~24 V
- no load power < 0.3W
- over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 85%



MODEL	output voltage	output current	output power	ripple and noise ¹	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	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				

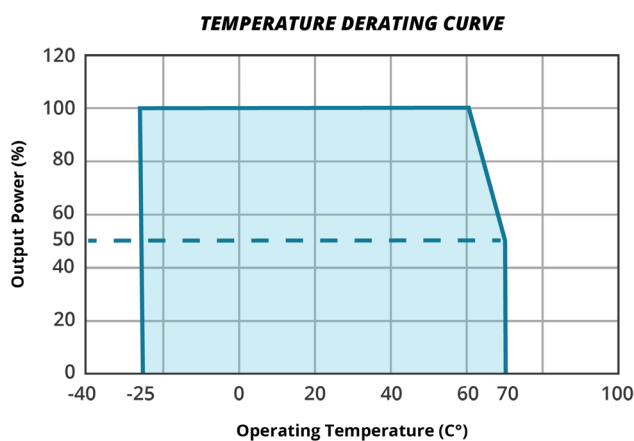
SAFETY & COMPLIANCE

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

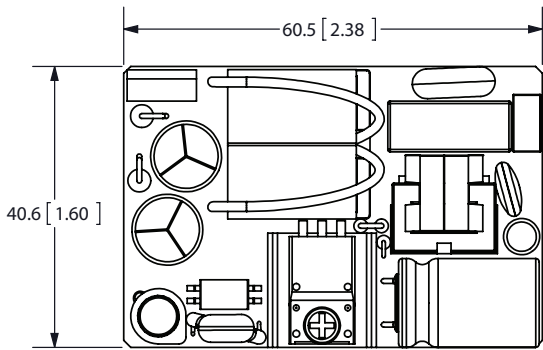
parameter	conditions/description	min	typ	max	units
dimensions	60.5 x 40.6 x 20.4 (2.382 x 1.598 x 0.803 inch)				mm
weight				50	g
cooling method	free air convection (see derating curve)				

MECHANICAL DRAWING

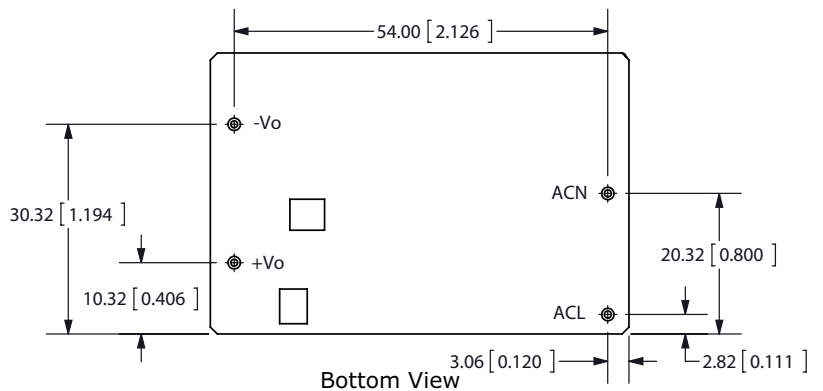
units: mm[inch]

tolerance: mm: X.X = ±0.5 ; X.XX = ±0.25

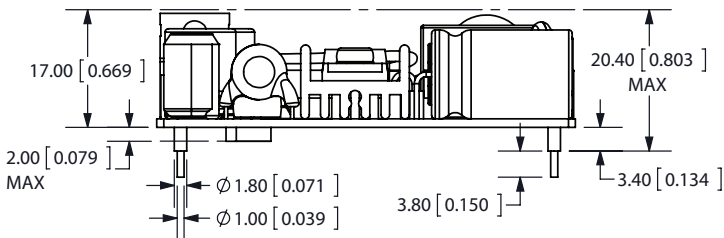
inch: X.XX = ±0.02 ; X.XXX = ±0.01



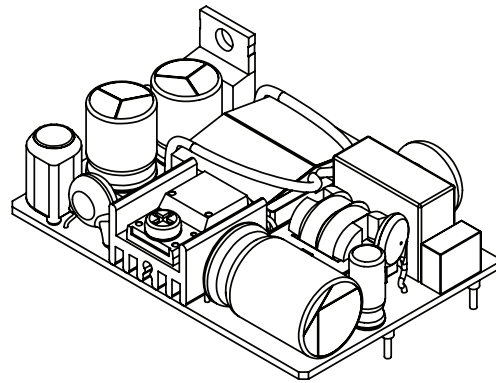
Top View



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
1.03	company logo updated	12/22/2020
1.04	derating curve updated	03/26/2021

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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