

15W Medical Power Adapters with Interchangeable Input Plugs

VP1501 series



2.36" x 1.71" x 1.58"

- Wide Input Range of 80 to 275VAC, 47 to 63 Hz.
- Interchangeable Input Plugs
- IEC60601-1 3rd Edition, 2 MOPP
- Class II
- Efficiency Level V



Model Number	Output Watts	Output Voltage	Output Amps	Efficiency	Input NL Power Consumption	Total Regulation	Ripple & Noise
VP1501-01	7.2	3.3VDC	2.18	65%	0.2 Watts	±5%	66mV p-p
VP1501-02	12	5VDC	2.4	80%	0.3 Watts	±5%	50mV p-p
VP1501-03	12	6VDC	2.0	81%	0.3 Watts	±5%	70mV p-p
VP1501-04	13.5	9VDC	1.5	83%	0.3 Watts	±5%	90mV p-p
VP1501-05	15	12VDC	1.25	84%	0.3 Watts	±5%	100mV p-p
VP1501-06	15	15VDC	1.0	85%	0.3 Watts	±5%	100mV p-p
VP1501-07	15	18VDC	0.83	86%	0.3 Watts	±5%	100mV p-p
VP1501-08	15	24VDC	0.62	86%	0.3 Watts	±5%	100mV p-p
VP1501-09	15	30VDC	0.5	86%	0.3 Watts	±3%	100mV p-p
VP1501-10	15	36VDC	0.41	86%	0.3 Watts	±3%	100mV p-p
VP1501-11	15	48VDC	0.31	86%	0.3 Watts	±3%	100mV p-p
VP1501-12	15	55VDC	0.27	86%	0.3 Watts	±3%	100mV p-p

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INPUT SPECIFICATIONS

Input Voltage Range	80-275 VAC (100-240V Nominal)	
	See Input Derate curve, Fig. 1	
Frequency Range (Sine Wave)	47-63 Hz	
Input Current	Low Line (100VAC)	0.6A max.
	High Line (240VAC)	0.4A max.
Inrush Current, typ (Cold Start)	Low Line (100VAC)	35A max.
	High Line (240VAC)	85A max.
Protection Class	Double Insulated, Class II	
Input NL Power Consumption	See Selection Chart	

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Output Power Range	0 to FL Rating	
Total Regulation (Note 2)	See Selection Chart	
Line Regulation, FL (Note 1)	± 1%, max.	
Over Load Protection*	110-150%, auto recover	
Short Circuit Protection	Auto Recover	
Transient Response	110Vin, FL	4mS
Temperature Coefficient	±0.04%/°C, typ	
Ripple/Noise (Note 3)	See Selection Chart	
Start Up / Hold Up Time	100Vin, FL	2S max. / 12mS min.

GENERAL SPECIFICATIONS

Input-Out Isolation	4000 VAC
Efficiency (FL, Nom. Input)	See Selection Chart
Safety	ANSI/AAMI ES 60601-1:2005 (UL/cUL 3rd Edition)

PHYSICAL SPECIFICATIONS

Size	2.36" x 1.71" x 1.58" (60 x 43.4 x 40.1mm)
Construction	Wallmount Style
Weight	5.82oz (165g)

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10 to +40°C (FL) *
	50% Load @ 70°C
	See Output Derate Curve, Fig. 2
Storage Temperature	-40 to +85°C *
Operating/Storage Humidity	0% to 95% RH *
Cooling	Free Air Convection
EMC	EN55011 (CISPR11), EN61000-3-2,-3 Class B
Surge Voltage	2kV, All Conditions
ESD Air	8kV, IEC61000-4-2
ESD Contact	6kV, IEC61000-4-2
MTBF MIL-HDBK-217F, 25°C	100K h
Operating Altitude	3000m
Vibration	5G, 10~500Hz, 10 min./1 cycle, 60 min. each along X, Y, Z axes
Flammability Rating	UL94V-1

NOTES

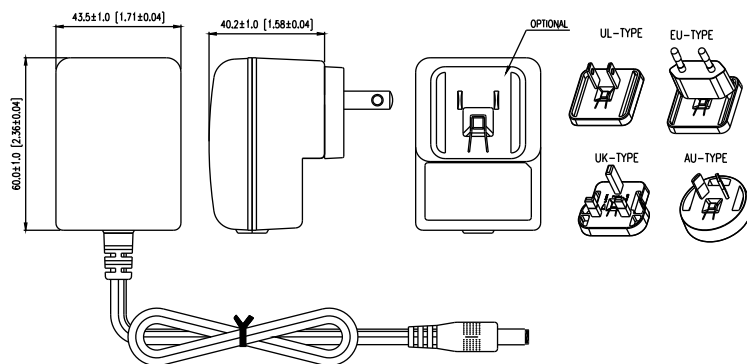
1. Line Regulation defined as changing the input voltage ±10% from nominal line at rated load.
2. Total Regulation is defined by as changing the load ±40% from 60% rated load.
3. Ripple & Noise is measured by using a 20MHz bandwidth limited oscilloscope and terminating the output with a 0.47uF capacitor at rated load and nominal line.

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

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MECHANICAL DIMENSIONS



DC OUTPUT CONNECTIONS

Coaxial Plug: -Vout —●— +Vout

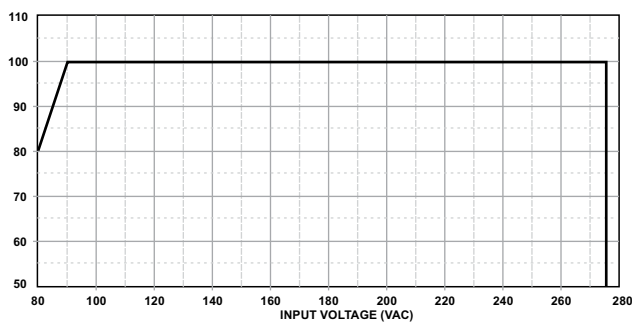
5.5mm outer diameter
2.1mm inner diameter, female
11mm length, center "+"

Dimensions are in mm [inches]

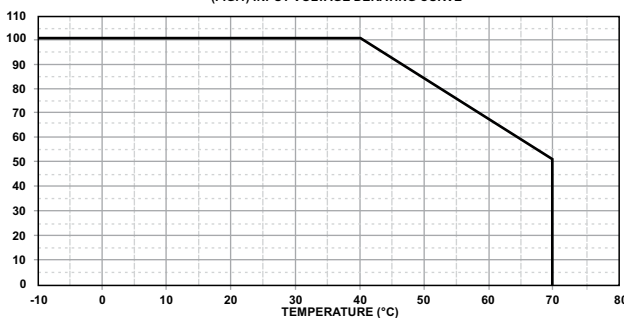
VP1501-01~04 Output Cord Length 48", 18AWG
VP1501-05~09 Output Cord Length 48", 20AWG
VP1501-110~112 Output Cord Length 48", 22AWG

The Regulation and Efficiency will change if output cable is modified.

DERATE CURVES



(FIG.1) INPUT VOLTAGE DERATING CURVE



(FIG.2) TEMPERATURE DERATING CURVE