



### Size:

2.36 x 1.71 x 1.58 inches 60.0 x 43.5 x 40.2 mm

#### **AC Plug Types:**

- Unites States ("U" Suffix)
- Europe ("E" Suffix)
- Australia ("A" Suffix")
- United Kingdom ("K" Suffix) Portable Medical Devices

## Weight:

5.82oz (165g)

#### Applications:

- Home Healthcare Equipment
- Patient Monitors
- Blood Pressure Systems
- ECG Machines

### **FEATURES**

- Class II System
- RoHS Compliant
- Up to 15 Watts Output Power
- 86% High Efficiency
- Energy Star 2.0, Efficiency Level V
- 80-275VAC Input Voltage Range
- Over Voltage & Over Load Protection
- Input to Output: 2MOPP

- Single Outputs Ranging from 3VDC to 55VDC
- -10°C to +70°C Operating Temperature Range
- Meets FCC Part-18 Class B & CISPR-11 EN55011 Class B Emission Limits
- UL/cUL 3rd Edition Medical Approvals
- Interchangeable Plug Options: United States, Europe, Australia, & United Kingdom Types
- Optional Output Connectors Available

#### SAFFTY APPROVALS













#### **DESCRIPTION**

The WMIHPU15 series of Class II medical AC/DC wall mount power supplies offers up to 15 watts of output power in a 2.36" x 1.71" x 1.58" package. This series consists of single output models ranging from 3VDC to 55VDC with an  $80\sim275$ VAC input voltage range and a - $10^{\circ}$ C to +70°C operating temperature. This series meets FCC Part-18 Class B and CISPR-11 EN55011 Class B Emission Limits and has ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition) and CE safety approvals. All units are RoHS and Energy Star Level V compliant. Plugs come in United States ("U" suffix), Europe ("E" suffix), Australia ("A" suffix), and United Kingdom ("K" suffix) types. Plugs are sold separately so please contact factory for ordering details.

MODEL SELECTION TABLE													
Model Number (1)	Input Voltage	Adjustable V Min	oltage Range Max	Adjustable C Min	urrent Range Max	Maximum Output Power	Ripple & Noise	Total Regulation	Efficiency	No Load Consumption			
WMIHPU15-101x	80 ~ 275VAC	3.0 VDC	4.99 VDC	1.44 A	2.40 A	7.2W	66mVp-p	±5%	65%	0.2W			
WMIHPU15-102x		5.0 VDC	5.99 VDC	2.00 A	2.40 A	12W	50mVp-p	±5%	80%	0.3W			
WMIHPU15-103x		6.5 VDC	8.0 VDC	1.50 A	1.84 A	12W	70mVp-p	±5%	82%	0.3W			
WMIHPU15-104x		8.0 VDC	11.0 VDC	1.22 A	1.68 A	13.5W	90mVp-p	±5%	83%	0.3W			
WMIHPU15-105x		11.0 VDC	13.0 VDC	1.15 A	1.36 A	15W	100mVp-p	±5%	84%	0.3W			
WMIHPU15-106x		13.0 VDC	16.0 VDC	0.94 A	1.15 A	15W	100mVp-p	±5%	85%	0.3W			
WMIHPU15-107x		16.0 VDC	21.0 VDC	0.72 A	0.94 A	15W	100mVp-p	±5%	85%	0.3W			
WMIHPU15-108x		21.0 VDC	27.0 VDC	0.55 A	0.72 A	15W	100mVp-p	±5%	86%	0.3W			
WMIHPU15-109x		27.0 VDC	33.0 VDC	0.45 A	0.55 A	15W	100mVp-p	±3%	86%	0.3W			
WMIHPU15-110x		33.0 VDC	40.0 VDC	0.37 A	0.45 A	15W	100mVp-p	±3%	86%	0.3W			
WMIHPU15-111x		40.0 VDC	48.0 VDC	0.32 A	0.37 A	15W	100mVp-p	±3%	86%	0.3W			
WMIHPU15-112x		48.0 VDC	55.0 VDC	0.28 A	0.32 A	15W	100mVp-p	±3%	86%	0.3W			

# **NOTES**

- 1. The "x" in the model number can be "U" for United States type plug; "E" for Europe type plug, "A" for Australia type plug, or "K" for United Kingdom type plug. Plugs are sold separately so please contact factory for ordering details.
- 2. Output can provide up to peak load when power supply starts up. Continuous staying in more than rated load is not allowed.
- 3. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 4. Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- 5. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- 6. Ripple & noise is measured by using 20MHz limited bandwidth and with 0.47F capacitor in parallel across the output at nominal line and rated load.
- 7. Hold-up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
- 8. Optional output connectors are available for this series. Please call factory for ordering details.



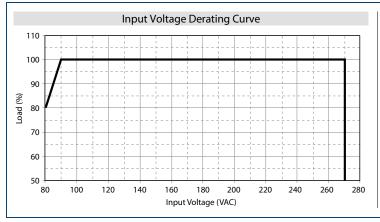
# TECHNICAL SPECIFICATIONS: WMIHPU15 SERIES

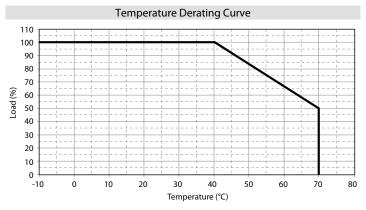
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Тур	Max	Unit		
INPUT SPECIFICATIONS							
	Safety Approvals Input Voltage Range	100		240	\/A.G		
Input Voltage	Derating linearly from 100% load at 90VAC to 80% load at 80VAC	80		275	VAC		
Input Frequency	Sine wave	47		63	Hz		
Input Current	100VAC, full load			0.6	۸		
input current	240VAC, full load			0.4	Α		
Inrush Current	100VAC, full load, 25°C, cold start			35	Α		
	240VAC, full load, 25°C, cold start			85	^		
No Load Power Consumption	230VAC, no load	See Table					
OUTPUT SPECIFICATIONS							
Output Voltage			See	Γable			
Line Regulation	See Note 4			1	%		
Total Regulation	See Note 5		See 7	See Table			
Output Power		See Table					
Output Current	See Table						
Ripple & Noise (peak to peak)	See Table						
Hold-up Time	See Note 7	12			ms		
Start-up Time	100~240VAC, full load	0.3		2	S		
Transient Response Time	110VAC, Full load			4	ms		
Temperature Coefficient		-0.04		+0.04	%/°C		
PROTECTION							
Short Circuit Protection			Auto-re	ecovery			
Over Load Protection	Recovers automatically after fault condition is removed	110		150	%		
GENERAL SPECIFICATIONS							
Efficiency			See Table				
Dielectric Withstanding Voltage	Primary to Secondary, limit current <10mA	5656			VDC		
Protection Classes		Double insulated, Class II					
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature	Derating linearly from 100% Load at 40°C to 50% load at 70°C	-10		+70	°C		
Storage Temperature	10~95% RH	-40		+85	°C		
Operating Humidity	Non-condensing	0		95	%RH		
Storage Humidity		0		95	%RH		
Cooling		Free air convection					
Flammability Rating		UL94V-1					
Vibration	10~500Hz, 10min./1cycle, 60 min each along X, Y, Z axes	5			G		
Operating Altitude (Elevation)				3000	m		
MTBF	MIL-HDBK-217F, 25°C	100,000			hours		
PHYSICAL SPECIFICATIONS							
Weight	5.82oz (165g)						
Dimensions (L x W x H)		2.36 x 1.71 x 1.58 inches (60.0 x 43.5 x 40.2 mm)					
	"U" suffix	United States					
A.C. Div.	"K" suffix	United Kingdom					
AC Plug	"E" suffix	Europe					
	"A" suffix	Australia					
Output Connector	Several options available						
SAFETY, EMC, & COMPLIANCE							
		ANSI/AAMI ES 60601-1:2005 (UL/cUL 3rd ed.)					
Safety Approvals		IEC60601-1 3rd edition					
				E			
EMC Emission	Compliance to EN55011 (CISPR11), EN61000-3-2,-3	В			Class		
Surge Voltage		2			kV		
Flectro Static Discharge	Air Discharge, IEC61000-4-2	8			k\/		
Liceno Static Discharge	Contact Discharge, IEC61000-4-2	6			I.V		
Compliance		RoHS Compliant					
CEC & Energy Star		CEC and Energy Star 2.0, Efficiency Level V					
Electro Static Discharge Compliance		8 6			kV		

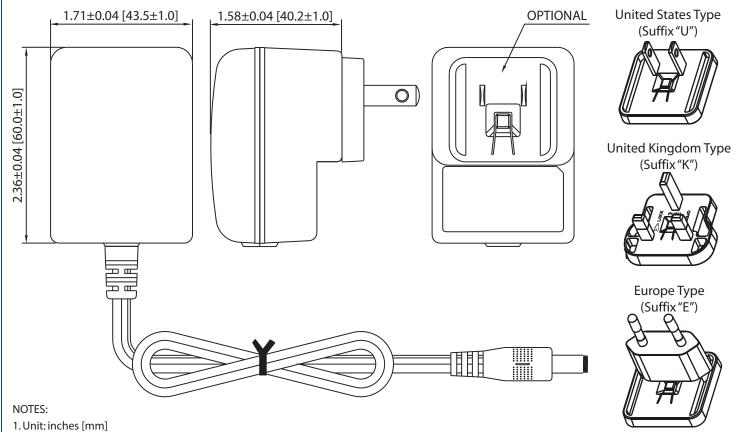


### **DERATING**





### **MECHANICAL DRAWING -**



- 2.Tolerance: ±0.04 [±1.0]
- 3. Weight: 5.82oz (165g)
- 4. Models WMIHPU15-101~104 need to use AWG#18/4FT output cable in order to meet the total regulation specified. Models WMIHPU15-105~109 need to use AWG#20/4FT output cable in order to meet the total regulation specified. Models WMIHPU15-110~112 need to use AWG#22/4FT output cable in order to meet the total regulation specified. The technical specifications will change if a different output cable is used.
- 5. Plugs are sold separately. Please call factory for ordering details.
- 6. Optional output connectors available. Please call factory for ordering details.
- 7. All dimensions are for reference only.





#### COMPANY INFORMATION-

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact Wall Industries for further information:

Phone: ☎(603)778-2300 Toll Free: ☎(888)597-9255 Fax: ☎(603)778-9797

E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive

Exeter, NH 03833