

Wall Industries, Inc.

## DTEM1070 SERIES

100~240VAC Input Voltage Range  
60~72 Watts, Single Outputs  
IEC-320-C14, C8, and C6 AC Inlet Types  
AC/DC Medical Desktop Power Supplies



IEC-320-C14



IEC-320-C8



IEC-320-C6



### FEATURES

- Single Outputs
- CEC / Energy Star Level V Compliant
- RoHS Compliant
- Short Circuit and Over Voltage Protection
- MTBF: > 30,000 Hours
- Dimensions: 5.20" x 2.13" x 1.22"
- 100~240VAC Input Voltage Range
- IEC-320-C14, IEC-320-C8, and IEC-320-C6 AC Inlet Connectors Available
- UL/cUL 60601-1 (3<sup>rd</sup> edition), TUV/RH EN/IEC 60601-1, CB, CE, and FCC Safety Approvals
- Optional Output Connectors Available

### DESCRIPTION

The DTEM1070 series of AC/DC medical desktop power supplies provides up to 72 Watts of continuous output power. All models have a single output and a wide input voltage range of 100~240VAC. All models are protected against over voltage and short circuit conditions. This series is RoHS and CEC/Energy Star Level V compliant and has UL/cUL 60601-1 (3<sup>rd</sup> edition), TUV/RH EN/IEC 60601-1, CB, CE, and FCC safety approvals. This series also has three AC inlet connector types available: IEC-320-C14, IEC-320-C8, and IEC-320-C6. Optional output connectors are also available. Please call factory for ordering details.

<b>SPECIFICATIONS: DTEM1070 Series</b>					
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.					
<b>SPECIFICATION</b>	<b>TEST CONDITIONS</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>	<b>Unit</b>
<b>INPUT SPECIFICATIONS</b>					
Input Voltage Range		100		240	VAC
Input Frequency		50		60	Hz
Input Current				2	A
Inrush Current				90	A
<b>OUTPUT SPECIFICATIONS</b>					
Output Current		See Table			
Output Voltage ( <i>See Note 2</i> )		See Table			
Line Regulation	Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line and rated load.	-1		+1	%
Load Regulation		-5		+5	%
Output Power		See Table			
Ripple & Noise	Measured at nominal line and full load with 20MHz limited bandwidth and 0.1 $\mu$ F ceramic and 47 $\mu$ F aluminum capacitors in parallel on the output.		250		mVp-p
Hold-up Time		8.3			ms
Turn-on Time				3	s
<b>PROTECTION</b>					
Over Voltage Protection		Latch off			
Short Circuit Protection		Automatic recovery			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency (typical)			85		%
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature		0		40	°C
Storage Temperature		-20		85	°C
Storage Humidity		5		95	%
MTBF		> 30,000 hours			
<b>PHYSICAL SPECIFICATIONS</b>					
Dimensions (L x W x H)		5.20 x 2.13 x 1.22 inches (132 x 54 x 31 mm)			
AC Inlet Connector ( <i>See Note 1</i> )		IEC-320-C14, IEC-320-C8, IEC-320-C6			
Weight		11.3oz (320g)			
<b>SAFETY &amp; COMPLIANCE</b>					
Safety Standards		UL/cUL 60601-1 (3 <sup>rd</sup> edition), TUV/RH EN/IEC 60601-1, FCC, CB, CE			
Compliance		RoHS, WEEE, CEC/Energy Star Level V			

**MODEL SELECTION TABLE**

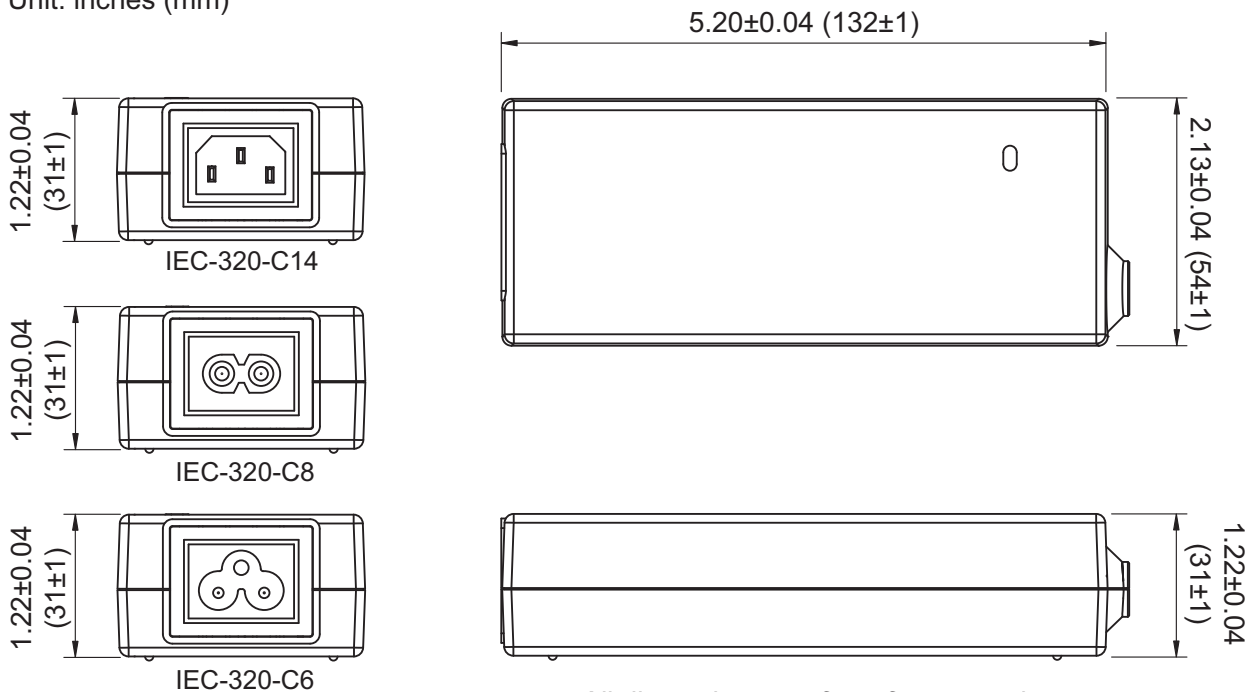
Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage <sup>(2)</sup>	Output Current		Ripple & Noise <sup>(3)</sup>	Maximum Output Power	AC Inlet Type
			Min	Max			
DTEM1070 <b>1</b> A	100 ~ 240 VAC	12 ~ 17 VDC	0A	6A	250mVp-p	72W	IEC-320-C14
DTEM1070 <b>1</b> B		18 ~ 24 VDC	0A	4A	250mVp-p	72W	
DTEM1070 <b>1</b> C		12 ~ 17 VDC	0A	5A	250mVp-p	60W	
DTEM1070 <b>1</b> D		18 ~ 24 VDC	0A	3.33A	250mVp-p	60W	
DTEM1070 <b>2</b> A	100 ~ 240 VAC	12 ~ 17 VDC	0A	6A	250mVp-p	72W	IEC-320-C8
DTEM1070 <b>2</b> B		18 ~ 24 VDC	0A	4A	250mVp-p	72W	
DTEM1070 <b>2</b> C		12 ~ 17 VDC	0A	5A	250mVp-p	60W	
DTEM1070 <b>2</b> D		18 ~ 24 VDC	0A	3.33A	250mVp-p	60W	
DTEM1070 <b>3</b> A	100 ~ 240 VAC	12 ~ 17 VDC	0A	6A	250mVp-p	72W	IEC-320-C6
DTEM1070 <b>3</b> B		18 ~ 24 VDC	0A	4A	250mVp-p	72W	
DTEM1070 <b>3</b> C		12 ~ 17 VDC	0A	5A	250mVp-p	60W	
DTEM1070 <b>3</b> D		18 ~ 24 VDC	0A	3.33A	250mVp-p	60W	

**NOTES**

1. The number in **red** represents the type of AC inlet: “**1**” is for IEC-320-C14 type, “**2**” is for IEC-320-C8 type, and “**3**” is for IEC-320-C6 type.
2. The output voltage is specified as a range (Ex: 18~24VDC); the customer must specify what they want the voltage set at.
3. Ripple and Noise is measured at nominal line and full load with 20MHz limited bandwidth and a 0.1μF ceramic and 47μF aluminum capacitors in parallel on the output.
4. Optional output connectors are available. Please call factory for ordering details.

**MECHANICAL DRAWING**

Unit: inches (mm)



*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:

<u>Phone:</u>	☎ (603)778-2300
<u>Toll Free:</u>	☎ (888)597-9255
<u>Fax:</u>	☎ (603)778-9797
<u>E-mail:</u>	<a href="mailto:sales@wallindustries.com">sales@wallindustries.com</a>
<u>Web:</u>	<a href="http://www.wallindustries.com">www.wallindustries.com</a>
<u>Address:</u>	5 Watson Brook Rd. Exeter, NH 03833