

IEC-320-C14



Size: 3.94 x 1.77 x 1.22 inches

IEC-320-C8



Size: 3.94 x 1.77 x 1.22 inches

IEC-320-C6



Size: 3.94 x 1.77 x 1.22 inches

IEC-320-C18



Size: 3.94 x 1.77 x 1.22 inches

## FEATURES

- Single Outputs
- RoHS & WEEE Compliance
- Efficiency Meets CEC Level V, VI
- Short Circuit & Over Voltage Protection
- IEC-320-C14, IEC-320-C8, IEC-320-C6, & IEC-320-C18 AC Inlets Available
- UL/cUL 60601: 3rd Edition Medical Approvals
- TUV/SUD EN/IEC 606001 approvals for Class II
- 100~240VAC Input Voltage Range
- MTBF > 30,000 Hours
- Optional Output Connectors Available
- CB, CE, FCC approvals

## DESCRIPTION

The DTEM1024 series of medical AC/DC desktop power supplies provides up to 36 Watts of continuous output power in a 3.94" x 1.77" x 1.22" package. All models have a single output and a wide input voltage range of 100~240VAC. This series is RoHS and WEEE compliant and meets CEC Level V, VI requirements. This series also has UL/cUL 60601 and TUV/SUD EN/IEC 60601 3rd edition (for class II) medical approvals. All models are protected against short circuit and over voltage conditions. Four AC inlet connector types are available for this series: IEC-320-C14, IEC-320-C8, IEC-320-C6, and IEC-320-C18. Optional output connectors are also available please call factory for ordering details.

MODEL SELECTION TABLE

Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage <sup>(2)</sup>	Output Current		Load Regulation	Line Regulation <sup>(3)</sup>	Ripple & Noise <sup>(4)</sup>	Output Power
			Min	Max				
DTEM1024Ax	100 ~ 240 VAC	5 ~ 8 VDC	0A	2.0A	±5%	±1%	100mVp-p	16W
DTEM1024Bx		5 ~ 8 VDC	0A	3.0A	±5%	±1%	100mVp-p	20W
DTEM1024Cx		5 ~ 8 VDC	0A	4.0A	±5%	±1%	100mVp-p	24W
DTEM1024Dx		9 ~ 11 VDC	0A	1.5A	±5%	±1%	250mVp-p	18W
DTEM1024Ex		9 ~ 11 VDC	0A	2.0A	±5%	±1%	250mVp-p	24W
DTEM1024Fx		9 ~ 11 VDC	0A	3.0A	±5%	±1%	250mVp-p	27W
DTEM1024Gx		12 ~ 17 VDC	0A	1.66A	±5%	±1%	250mVp-p	20W
DTEM1024Hx		12 ~ 17 VDC	0A	2.5A	±5%	±1%	250mVp-p	30W
DTEM1024Jx		18 ~ 24 VDC	0A	1.33A	±5%	±1%	350mVp-p	24W
DTEM1024Kx		18 ~ 24 VDC	0A	1.66A	±5%	±1%	350mVp-p	30W
DTEM1024Mx		36 ~ 48 VDC	0A	0.55A	±5%	±1%	480mVp-p	20W
DTEM1024Nx		36 ~ 48 VDC	0A	0.83A	±5%	±1%	480mVp-p	30W
DTEM1024Px		12V	0A	3.0A	±5%	±1%	250mVp-p	36W
DTEM1024Qx		12V	0A	2.0A	±5%	±1%	250mVp-p	24W
DTEM1024Rx		24V	0A	1.5A	±5%	±1%	350mVp-p	36W

## NOTES

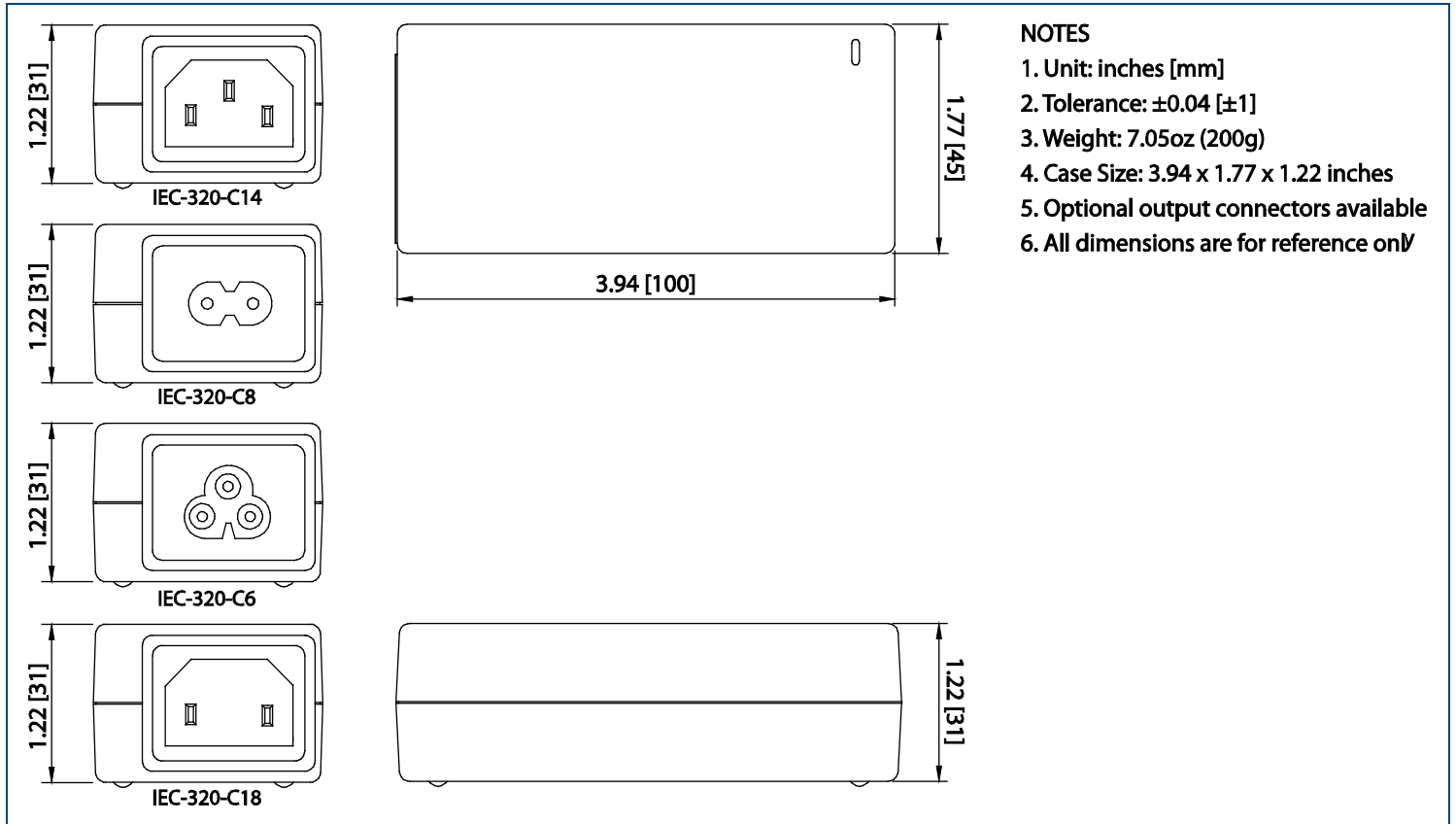
1. The "x" in the model number represents the type of AC inlet connector: "1" can be "1" for IEC-320-C14 type, "2" for IEC-320-C8 type, "3" for IEC-320-C6, or "6" for IEC-320-C18 type.
2. The output voltage is specified as a range (Ex: 36~48 VDC); the customer must specify what they want the voltage set at.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Ripple and Noise is measured at nominal line and full load with 20MHz bandwidth and a 0.1µF ceramic capacitor and 47µF aluminum capacitors in parallel across the output.
5. LED option available.
6. Optional output connectors are available. Please call factory for ordering details.

**TECHNICAL SPECIFICATIONS: DTEM1024 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	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Voltage		100		240	VAC
Input Frequency		50		60	Hz
Input Current		0.5		1	A
Inrush Current	Cold start			60	A
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Line Regulation	Defined by changing $\pm 10\%$ of input voltage from nominal line at rated load	-1		+1	%
Load Regulation		-5		+5	%
Output Power		See Table			
Output Current		See Table			
Minimum Load		0			A
Ripple & Noise (20MHz BW)	Measured at nominal line and full load with 0.1 $\mu$ F ceramic and 47 $\mu$ F aluminum capacitors in parallel	See Table			
Hold-up Time		8.3			ms
Turn-on Time				3	s
<b>PROTECTION</b>					
Over Voltage Protection		Automatic recovery			
Short Circuit Protection		Automatic recovery			
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		Meet CEC Level V, VI			
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature		0		+40	°C
Storage Temperature		-20		+85	°C
Operating Humidity		10		90	%
Storage Humidity		5		95	%
Cooling		Free air convection			
MTBF		30,000			hours
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		7.05oz (200g)			
Dimensions (L x W x H)		3.94 x 1.77 x 1.22 inches (100 x 45 x 31 mm)			
AC Inlet Connector	Suffix "1"	IEC-320-C14			
	Suffix "2"	IEC-320-C8			
	Suffix "3"	IEC-320-C6			
	Suffix "6"	IEC-320-C18			
Output Connectors	Call factory for ordering details	Several options available			
<b>SAFETY &amp; COMPLIANCE</b>					
Safety Approvals	For class II only	UL/cUL UL60601: 3rd edition			
		TUV/SUD EN/IEC 60601-1: 3rd edition CB, CE, and FCC			
Compliance		RoHS, WEEE, CEC Level V, VI			

**MECHANICAL  
DRAWING**



**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.

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