



Size: 3.94in x 2.30in x 1.29in (100mm x 58.5mm x 32.8mm)

## **FEATURES**

- 100~240VAC
- Single Outputs
- Possess Risk Analysis Report
- Means of Patient Protection
- IEC-320-C14, IEC-320-C18, or IEC-320-C16
- Universal Input Voltage Range of
   Over Voltage, Over Current, and Short Circuit Protection
  - For use in Personal Hygiene and Health Care **Appliances**
  - UL: ES60601-1, CSA: C22/2 NO. 60601-1, CB: IEC60601-1, and EN: EN60601-1 Safety Approvals

#### **DESCRIPTION**

The DTGMPU18 series of AC/DC medical desktop power supplies offers 18 watts of output power in a 3.94" x 2.30" x 1.29" package. This series consists of single output models with universal input voltage range of 100~240VAC and different options available. Either an IEC-320-C14, IEC-320-C18, or IEC-320-C6 AC inlet and there are several optional output connectors available. Each model in this series has over voltage, over current, and short circuit protection while 5~6 and 8~58VDC models meet EISA 2007/DoE (VI) & EU ErP/CoC (5).

MODEL SELECTION TABLE											
Model Number	Input Voltage	Output	Measured	d Output Current		Ripple	Load	Output	Efficiency Level	Effici	ency
	Range	Voltage	at Output	Min Load	Max Load	Max.	Regulation	Power	(DoE/CoC)	DoE	CoC
DTGMPU18X-1		5~6VDC	5	2.50A	3.00A	80mV	±5%	15W	VI, 5	>81.39%	>81.84%
DTGMPU18X-1-1		6~8VDC	7.5	1.87A	2.50A	80mV	±5%	15W	V, 4	>79.2%	>79.2%
DTGMPU18X-2		8~11VDC	9	1.64A	2.25A	100mV	±5%	18.04W	VI, 5	>85%	>85.45%
DTGMPU18X-3		11~13VDC	12	1.38A	1.64A	120mV	±5%	18.04W	VI, 5	>85%	>85.45%
DTGMPU18X-4	100~240VAC	13~16VDC	15	1.13A	1.38A	150mV	±5%	18.08W	VI, 5	>85%	>85.45%
DTGMPU18X-5		16~21VDC	18	0.86A	1.13A	150mV	±5%	18.08W	VI, 5	>85%	>85.45%
DTGMPU18X-6		21~27VDC	24	0.67A	0.86A	150mV	±5%	18.09W	VI, 5	>85%	>85.45%
DTGMPU18X-7		27~33VDC	28	0.55A	0.67A	240mV	±3%	18.15W	VI, 5	>85%	>85.45%
DTGMPU18X-8		33~58VDC	48	0.32A	0.55A	240mV	±3%	18.56W	VI, 5	>85%	>85.45%

All specificat	ions are based on 25°C, Nominal Input Voltage, and Maximum Output Curr	ent unless otl	herwise note	ed.
	We reserve the right to change specifications based on technological	advances.		
SPECIFICATION	TEST CONDITIONS	Min	Тур	Ma

SPECIFICATION	TEST CONDITIONS	Mın	Тур	Max	Unit			
INPUT SPECIFICATIONS								
Input Voltage Range		100		240	VAC			
Input Frequency		47		63	Hz			
Input Current		0.45		0.2	Α			
Inrush Current	@115VAC, 25°C, Cold Start		50		A			
	@230VAC, 25°C, Cold Start		90		^			
Leakage Current	@240VAC/50Hz			0.1	mA			
OUTPUT SPECIFICATIONS								
Output Voltage		See Table						
Line Regulation	For any input voltage change between input voltage range			±1	%			
Load Regulation	Variations from minimum to maximum output current	See Table						
Output Power		See Table						
Output Current		See Table						
Ripple		See Table						
Transient Response	Maximum Excursion of 45 or better on all models.  Recovering to 1% of final value within 500uS after a 25% step load change.							
Set Up Time	@Full Load		1000		mS			
Hold Up Time	@Full Load		10		mS			
Rise Time	@Full Load		50		mS			
Temperature Coefficient	All Outputs		00	±0.04	%/°C			
PROTECTION	7 til Outputo			20.04	70/ 0			
Short Circuit Protection	Hiccup Mode	Automatic Recovery						
Over Current Protection	Hiccup Mode			c Recovery				
	Rated Output Current	110			%			
	Protected by Zener diode							
Over Voltage Protection	Rated Output Voltage	110		140	%			

**SPECIFICATIONS** 



SPECIFICATIONS								
All specif	cations are based on 25°C, Nominal Input Voltage, and Maximum Output Curren		erwise note	d.				
We reserve the right to change specifications based on technological advances.								
SPECIFICATION	TEST CONDITIONS	Min	Тур	Max	Unit			
ENVIRONMENTAL SPECIFIC	CATIONS							
Operating Temperature		0		40	°C			
Storage Temperature		-40		85	°C			
Relative Humidity	Non-Condensing	5		95	%RH			
Derating	Derated from 100% at 40°C linearly to 70% at 50°C							
MTBF	@Full Load at 25°C ambient	100,000			Hours			
GENERAL SPECIFICATIONS								
Efficiency		See Table						
Withstanding Voltage	From Input to Output		5656		VDC			
Insulation Resistance	From Input to Output	50			ΜΩ			
PHYSICAL SPECIFICATIONS								
Weight		4.94~5.64oz (140~160g)			g)			
Dimensions (L x W x H)		;	3.94in x 2.30in x 1.29in					
Differisions (L X VV X II)		(100	0mm x 58.5	mm x 32.8	mm)			
SAFETY CHARACTERISTICS								
	UL: ES60601-1							
Safety Approvals	CSA: C22.2 NO. 60601-1							
	CB: IEC 60601-1							
	EN:EN60601-1							
EMC	CE: EN60601-1-2							
LIVIO	FCC Part 15/Part 18 Subpart B							

## **NOTES**

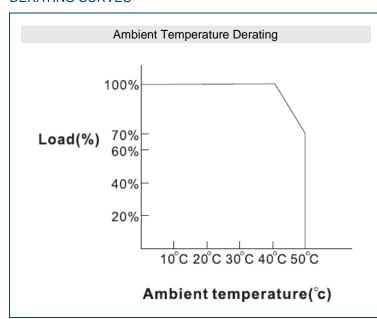
- 1. "X" in model number indicates AC Inlet. "X" can either be "A" for IEC-320-C14, "B" for IEC-320-C8, or "C" for IEC-320-C6.
- 2. Avg. Efficiency: averages the efficiency at 25, 50, 75, and 100%.
- 3. Standard Output Cables: 5~5.9V: UL2468, 16AWG, 1M

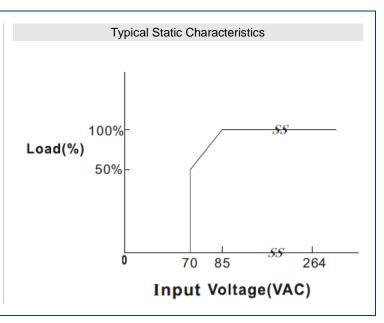
6~8V: UL2468, 20AWG, 4FT 8~11V: UL2468, 16AWG, 1M 11~13V: UL2468, 18AWG, 1M 13~58V: UL2468, 22AWG, 5FT

4. Optional output connectors

\*Due to advances in technology, specifications subject to change without notice.

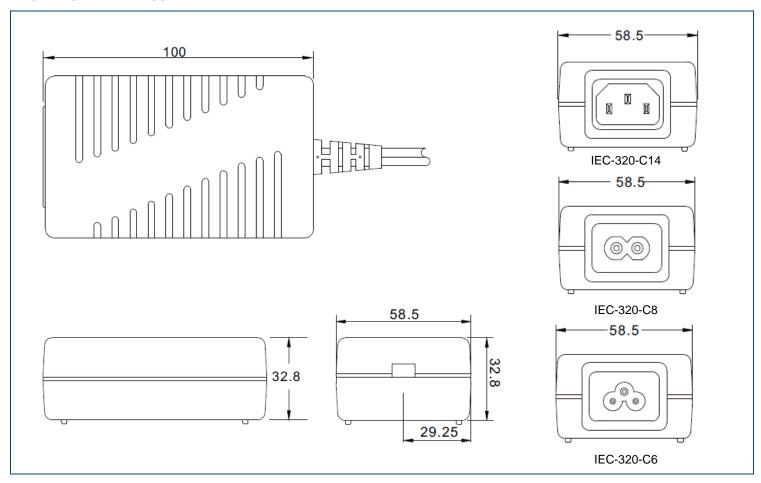
# **DERATING CURVES** -







#### MECHANICAL DRAWINGS



## 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