







Size: 3.94in x 2.3in x 1.29in (100mm x 58.5mm x 32.8mm)

## **OPTIONS**

- AC Inlet
  - -IEC-320-C14
  - -IEC-320-C8
  - -IEC-320-C6
- Output Connector

## **FEATURES**

- Universal Input Voltage of 100~240VAC
- Output Voltages Ranging from 5V~48V
- Single Outputs
- High Efficiency Up to 85.45%
- Optional AC Inlets Available
- Optional Output Connectors Available
- Short Circuit, Over Voltage, and Over Current Protection
- Meets EISA 2007/DoE VI &EU ErP/CoC 5
- UL60950-1, CSA C22.2, EN60950-1, IEC60950-1, and J60950-1 Safety Approvals

#### DESCRIPTION

The DTGPSU18 series of AC DC desktop power supplies offers up to 18 watts of output power in a 3.94" x 2.3" x 1.29" package. This series consists of single output models with a universal input range of 100~240VAC and output voltages ranging from 5V~48V. Three AC inlets are available for the models: IEC-320-C14, IEC-320-C8, or IEC-320-C6. Each model in this series is protected against short circuit, over voltage, and over current conditions and also has UL60950-1, CSA C22.2, EN60950-1, IEC60950-1 and J60950-1 safety approvals. This series has a high efficiency up to 85.45% and are efficiency Level VI compliant. Please call factory for order details.

MODEL SELECTION TABLE										
Model Number <sup>(1)</sup>	Input Voltage Range	Output Voltage Range	Measured at Output	Output Current		Ripple & Noise	No Load	Output	Efficiency <sup>(2)</sup>	
				Min Load	Max Load	Kippie & Noise	Power Consumption	Power	DoE (VI)	CoC (5)
DTGPSU18x-1	100~240VAC	5~6VDC	5	2.50A	3.00A	80mV	<0.075	15W	81.39%	81.84%
DTGPSU18x-2		8~11VDC	9	1.64A	2.25A	100mV		18.04W	85%	85.45%
DTGPSU18x-3		11~13VDC	12	1.38A	1.64A	120mV		18.04W	85%	85.45%
DTGPSU18x-4		13~16VDC	15	1.13A	1.38A	150mV		18.08W	85%	85.45%
DTGPSU18x-5		16~21VDC	18	0.86A	1.13A	150mV		18.08W	85%	85.45%
DTGPSU18x-6		21~27VDC	24	0.67A	0.86A	150mV		18.09W	85%	85.45%
DTGPSU18x-7		27~33VDC	28	0.55A	0.67A	240mV		18.15W	85%	85.45%
DTGPSU18x-8		33~58VDC	48	0.32A	0.55A	240mV		18.56W	85%	85.45%



#### SPECIFICATIONS 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** Unit Max Тур INPUT SPECIFICATIONS Input Voltage Range 100 240 VAC 47 63 Hz Input Frequency Input Current 0.45 0.2 Α @115VAC at 25°C Cold Start 50 Inrush Current Α @230VAC at 25°C Cold Start 90 Leakage Current @240VAC/50Hz 0.1 mΑ **OUTPUT SPECIFICATIONS** Output Voltage See Table Line Regulation For any input voltage change between input voltage range % Load Regulation Typical variations from minimum to maximum output current. -5 +5 % Output Power See Table Output Current See Table Ripple & Noise See Table Transient Response Recovering to 1% of final value within 500µS after a 25% step load change ≥4 % Setup Time @Full Load 1000 mS Hold Up Time @Full Load 10 mS @Full Load Rise Time 50 mS Temperature Coefficient %/ºC All outputs ±0.04 PROTECTION Short Circuit Protection Hiccup Mode **Automatic Recovery** Hiccup Mode **Automatic Recovery** Over Current Protection 110% Rated Output Current Protected by Zener Diode Over Voltage Protection Rated Output Voltage 110 140 % **ENVIRONMENTAL SPECIFICATIONS** Operating Case Temperature 0 40 ٥С ٥С Storage Temperature -40 85 Relative Humidity Non-Condensing 5 95 % Derated from 100% at +40°C linearly to 70% at 50°C Derating MTBF @Full Load at 25°C ambient 100,000 hours **GENERAL SPECIFICATIONS** Efficiency See Table Insulation Resistance Input to Output ΜΩ Withstand Voltage 4242 Input to Output VDC PHYSICAL SPECIFICATIONS Weight 4.94~5.64oz (140~160g) 3.94in x 2.3in x 1.29in Dimensions (L x W x H) (100mm x 58.5mm x 32.8mm) SAFETY UL60950-1 CSA C22.2 EN60950-1 Safety Approvals IEC60950-1 J60950-1 CE: Emission: EN55022; EN61000-3-2,3/ Immunity: IEC61000-4-2,3,4,5,6,11

# **NOTES**

FCC 47 CFR Part 15 Subpart B

- (1) "x" in model number references the AC inlet options. "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% of max. rated output current.
- (3) Optional output connectors available

Standard Output Cables: 5~11V: UL1571, 16AWG, 1M

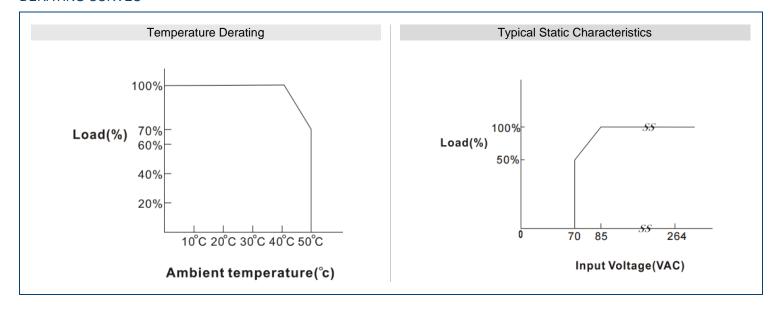
11~13V: UL2468, 18AWG, 1M

13~58V: UL2468, 22AWG, 5FT

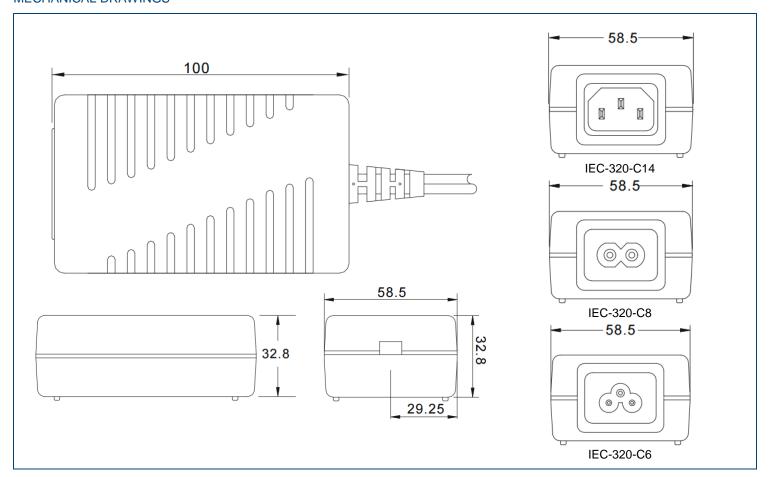
**EMC** 



## **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