

IEC-320-C14 Inlet







IEC-320-C6 Inlet



Size: 4.23in x 2.64in x 1.42in (107.5mm x 67mm x 36mm)







# FCCECBLPS

#### **OPTIONS**

- AC Inlet -IEC-320-C14. IEC-320-C8. IEC-320-C6, Mains Cord
- Cord Type -3 Pin USA, 2 Pin USA, Europe

#### **FEATURES**

- Universal Input Voltage
- Single Output
- 3 Pin USA, 2 Pin USA, or European Plugs
- Cord Input Options Available
- Meets EISA 2007/DoE (VI) and EU ErP/CoC (5) for 11~50VDC Models
- Short Circuit, Over Current, and Over Voltage Protection
- IEC-320-C14, IEC-320-C8, IEC-320-C6, or Mains UL60950-1; CSA C22.2, EN60950-1, IEC60950-1, PSE and J60950-1 Safety Approvals

# **DESCRIPTION**

The DTGPSU30 series of AC/DC desktop power supply offers up to 30 watts of output power in a 4.23" x 2.64" x 1.42" package. This series consists of single output models with a universal input voltage and high efficiency. Several options are available for this series including AC inlet and cord type. Each model in this series has short circuit, over current, and over voltage protection while 11~50VDC models meet EISA 2007/DoE (VI) and EU ErP/CoC (5). This series has UL60905-1; CSA C22.2, EN60950-1, IEC60950-1, PSE and J60950-1 safety approvals. Please contact factory for order details.

| MODEL SELECTION TABLE       |                        |                            |                                  |       |                         |               |                    |                  |                |                              |                    |
|-----------------------------|------------------------|----------------------------|----------------------------------|-------|-------------------------|---------------|--------------------|------------------|----------------|------------------------------|--------------------|
| Model Number <sup>(1)</sup> | Input Voltage<br>Range | Output<br>Voltage<br>Range | Output Current Min Max Load Load |       | Max.<br>Output<br>Power | Ripple<br>Max | Load<br>Regulation | DoE (VI) CoC (5) |                | No Load<br>Power Consumption | Measured at Output |
| *DTGPSU30X-0Y               | 100~240VAC             | 3~5VDC                     | 5A                               |       | 15~25W                  | 50mV          | 5%                 | (V)<br>>77.13%   | (4)<br>>77.13% | <0.3W                        | 3.3                |
| *DTGPSU30X-1Y               |                        | 5~6VDC                     | 4.17A                            | 5.00A | 25W                     | 50mV          | 3%                 | (V)<br>>80.24%   | (4)<br>>80.24% | <0.3W                        | 5                  |
| *DTGPSU30X-1-1Y             |                        | 6~8VDC                     | 3.13A                            | 4.15A | 25W                     | 80mV          | 3%                 | (V)<br>>82.35%   | (4)<br>>82.35% | <0.3W                        | 7.5                |
| DTGPSU30X-2Y                |                        | 8~11VDC                    | 3.71A                            | 2.73A | 30W                     | 80mV          | 3%                 | (V)<br>>83.49    | (4)<br>>83.49  | <0.3W                        | 9                  |
| DTGPSU30X-3Y                |                        | 11~13VDC                   | 2.31A                            | 2.70A | 30W                     | 120mV         | 2%                 | (VI)<br>>86.95%  | (5)<br>>87.70% | <0.075W                      | 12                 |
| DTGPSU30X-4Y                |                        | 13~16VDC                   | 1.88A                            | 2.29A | 30W                     | 140mV         | 2%                 | (VI)<br>>86.95%  | (5)<br>>87.70% | <0.075W                      | 15                 |
| DTGPSU30X-5Y                |                        | 16~21VDC                   | 1.43A                            | 1.86A | 30W                     | 140mV         | 8%                 | (VI)<br>>86.95%  | (5)<br>>87.70% | <0.075W                      | 18                 |
| DTGPSU30X-6Y                |                        | 21~27VDC                   | 1.12A                            | 1.43A | 30W                     | 150mV         | 8%                 | (VI)<br>>86.95%  | (5)<br>>87.70% | <0.075W                      | 24                 |
| DTGPSU30X-7Y                |                        | 27~33VDC                   | 0.91A                            | 1.12A | 30W                     | 240mV         | 5%                 | (VI)<br>>86.95%  | (5)<br>>87.70% | <0.075W                      | 28                 |
| DTGPSU30X-8Y                |                        | 33~50VDC                   | 0.61A                            | 0.91A | 30.5W                   | 240mV         | 5%                 | (VI)<br>>86.99%  | (5)<br>>87.76% | <0.075W                      | 48                 |

\*No LPS Safety



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| SPECIFICATIONS               |   |                          |   |                |          |  |  |
|------------------------------|---|--------------------------|---|----------------|----------|--|--|
| All specifications a         | re based on 25°C, Nominal Input Voltage, and Maximum Output Curren<br>We reserve the right to change specifications based on technological ad | it unless oth<br>vances. | nerwise note  | ed.            |          |  |  |
| SPECIFICATION                | TEST CONDITIONS   | Min                      | Тур   | Max            | Unit     |  |  |
| INPUT SPECIFICATIONS         |   |                          |   |                |          |  |  |
| Input Voltage Range          |   | 100                      |   | 240            | VAC      |  |  |
| Input Frequency              |   | 50                       |   | 60             | Hz       |  |  |
| Input Current                |   |                          |   | 0.7            | Α        |  |  |
| •                            | @115VAC at 25°C Cold Start  |                          | 65  | 5              |          |  |  |
| Inrush Current               | @230VAC at 25°C Cold Start  | 95                       |   | _ A            |          |  |  |
|                              | Class I @240VAC/50Hz  |                          | 3.5   |                |          |  |  |
| Leakage Current              | Class II @240VAC/50Hz   |                          |   | 0.25           | mA       |  |  |
| OUTPUT SPECIFICATIONS        |   |                          |   |                | <u>'</u> |  |  |
| Output Voltage               |   |                          | See   | Table          |          |  |  |
| Line Regulation              | For any input voltage change between input voltage range  |                          |   | ±1             | %        |  |  |
| Load Regulation              | Typical ±5% variations from min to max output current   |                          | See   | Table          | ,,,      |  |  |
| Output Power                 | - yprodi 2070 tandiono non nim to max carpat can on   |                          |   | Table          |          |  |  |
| Output Current               |   | See Table                |   |                |          |  |  |
| Ripple                       |   |                          |   | Table          |          |  |  |
| Тарріс                       | Maximum excursion of 4% or better on all models.  |                          | 000   | Table          | 1        |  |  |
| Transient Response           | Recovering to 1% of final value within 500uS after 25% load change  |                          |   |                |          |  |  |
| Set Up Time                  | @Full Load  |                          | 300   |                | ms       |  |  |
| Hold Up Time                 | @Full Load  |                          | 10  |                | ms       |  |  |
| Rise Time                    | @Full Load  |                          | 50  |                | ms       |  |  |
| Temperature Coefficient      | All Outputs   |                          | - 00  | ±0.04          | %/°C     |  |  |
| PROTECTION                   | 7 iii Outputo   |                          |   | 20.04          | 70/ 0    |  |  |
| Short Circuit Protection     |   | Hicci                    | ıp Mode; Au   | Itomatic Re    | COVERV   |  |  |
| Chort Olicult i foloction    | Hiccup Mode; Automatic Recovery   | 111000                   | ip Mode, At   | itorriatio rec | covery   |  |  |
| Over Current Protection      | Rated Output Voltage  | 110                      |   |                | %        |  |  |
|                              | Protected by Zener Diode  | 110                      |   |                | /0       |  |  |
| Over Voltage Protection      | Rated Output Voltage  | 110                      |   | 140            | %        |  |  |
| ENVIRONMENTAL SPECIFICATIONS |   | 110                      |   | 140            | /0       |  |  |
| Operating Temperature        | See Derating Curve  | 0                        |   | 40             | °C       |  |  |
| Storage Temperature          | See Derailing Curve   | -40                      |   | 85             | °C       |  |  |
| Relative Humidity            | Non-Condensing  | 5                        |   | 95             | %        |  |  |
| Derating                     | Derated from 100% at 40°C linearly to 70% at 50°C   | 3                        |   | 95             | 70       |  |  |
| MTBF                         | @Full Load at 25°C Ambient  | 100,000                  |   |                | Hours    |  |  |
| GENERAL SPECIFICATIONS       | Wir un Load at 25 C Ambent  | 100,000                  |   |                | Tiours   |  |  |
| Efficiency                   |   |                          | 200   | Table          |          |  |  |
| Withstanding Voltage         | From Input to Output  |                          | 4242  | Table          | VDC      |  |  |
| Isolation Resistance         |   | 50                       | 4242  |                | MΩ       |  |  |
|                              | From Input to Output  | 50                       |   |                | IVIL2    |  |  |
| PHYSICAL SPECIFICATIONS      |   | 44                       | 2.50.44.44  | (200 400       | ) \      |  |  |
| Weight                       |   |                          | 0.58~14.110   |                |          |  |  |
| Dimensions (L x W x H)       |   |                          | 4.23in x 2.64in x 1.42in<br>(107.5mm x 67mm x 36mm) |                |          |  |  |
| SAFETY CHARACTERISTICS       |   | (1)                      | 07.3HIII X 0  | 7111111 X 3011 | 1111)    |  |  |
| SAFETT CHARACTERISTICS       | UL60950-1 <sup>(5)</sup> ; CSA C22.2  |                          |   |                |          |  |  |
| Safety Approvals             | EN60950-1<br>EC60950-1<br>J60950-1<br>PSE   |                          |   |                |          |  |  |
| EMC                          | CE: Emission: EN55022<br>EN61000-3-2, 3/Immunity: IEC61000-4-2,3, 4, 5, 6, 11<br>FCC 47 CFR Part F15 Subpart B                                |                          |   |                |          |  |  |

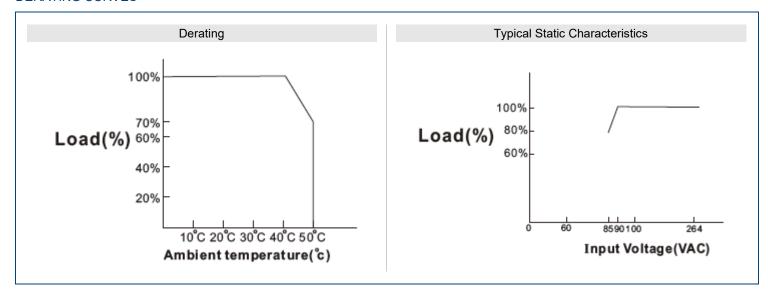
# **NOTES**

- 1. "X" indicates AC inlet. "X" can either be "A" for IEC-320-C14, "B" for IEC-320-C8, "C" for IEC-320-C6, or "D" for Mains Cord. "Y" in the model name indicates mains cord type. "Y" can either be "U" for 2-Pin American cord, "U1" for 3-Pin American cord, or "E" for European cord. "Y" will only change if "D" is selected to represent "X".
- 2. The load regulation c/be at ±5% with remote sensor
- 3. Avg. Eff. (%): Averages the efficiency at 25, 50, 75, and 100% of max. rated output current.
- Standard Output Cable: 5~21V: UL2468, 16AWG, 1M 21~50V: UL2468, 18AWG, 6FT
- 5. This product is Listed to applicable standards and requirements by UL.

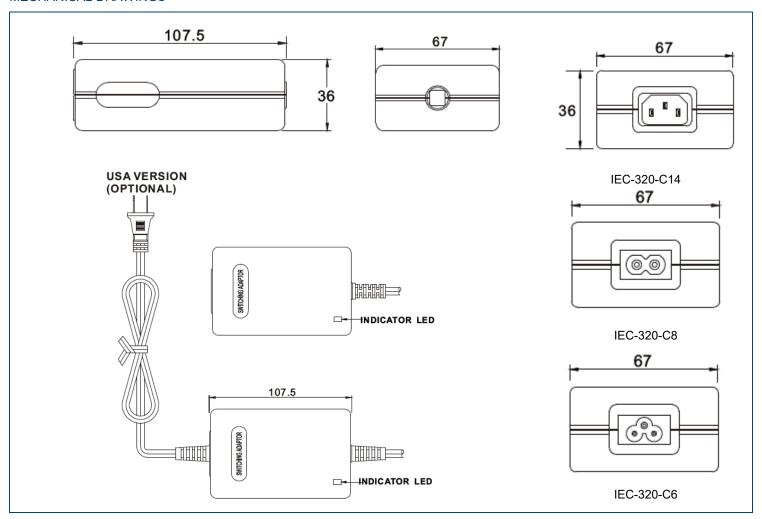
\*Due to advances in technology, specifications subject to change without notice.



# **DERATING CURVES** :



# **MECHANICAL DRAWINGS**





#### MODEL NUMBER SETUP :

| DTGPSU      | 30           | X  | - | 5   | Υ                                  |
|-------------|--------------|--|---|---|------------------------------------|
| Series Name | Output Power | AC Inlet   |   | Ouptut Voltage  | Remote On/Off & Pin Length         |
|             |              | A: IEC-320-C14 B: IEC-320-C8 C: IEC-320-C6 D: MAINS CORD |   | 0: 3~5VDC<br>1: 5~6VDC<br>1-1: 6~8VDC<br>2: 8~11VDC<br>3: 11~13VDC      | U: 2-Pin US Cord U1: 3-Pin US Cord |
|             |              |  |   | 4: 13~16VDC<br>5: 16~21VDC<br>6: 21~27VDC<br>7: 27~33VDC<br>8: 33~50VDC | E: European Cord                   |

# 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: 2015 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:

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