

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 250 & 500W Single Output Power Supplies

## **Features**

- ◆ High Efficiency, up to 93%
- ◆ 1.6" high (For 1U racking)
- ◆ Wide Range AC Input
- ◆ 250W Convection Cooled
- ◆ Five year warranty



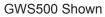
## **Key Market Segments & Applications**













| Specifications                   |     |   |  |  |  |  |
|----------------------------------|-----|---|--|--|--|--|
| Model                            |     | GWS250  | GWS500   |  |  |  |
| AC Input Voltage (300VAC for 5s) | VAC | 85 - 264VAC   |  |  |  |  |
| Input Frequency                  | Hz  | 47 - 63Hz   |  |  |  |  |
| DC Input Voltage                 | VDC | 120 - 373VDC*   |  |  |  |  |
| Inrush Current (cold start)      | Α   | 20A at 115VAC, 40A at 230VAC  |  |  |  |  |
| Power Factor (1)                 | -   | Meets EN61000-3-2 (Typical PF 0.98/0.95)  |  |  |  |  |
| Input Current (115/230VAC)       | Α   | 3.0 / 1.4   | 5.5 / 2.7  |  |  |  |
| Temperature Coefficient          | °C  | <0.02%/°C   | (0 - 50°C)   |  |  |  |
| Overcurrent Protection           | -   | >105% of nominal or >101% of peak. 12V hiccup style, 24V-48V Constant current style               |  |  |  |  |
| Overvoltage Protection (2)       | V   | 12V: 13.8 - 16.2V24V: 30.3 - 35.5V, 36V: 41.4 - 48.6V, 48V: 60 -69.6V                             |  |  |  |  |
| Overtemperature Protection (2)   | -   | Yes   |  |  |  |  |
| Hold Up Time (115 / 230V input)  | ms  | 16ms  |  |  |  |  |
| Leakage Current (230VAC 60Hz)    | mA  | <0.7  | 75mA   |  |  |  |
| Remote Sense                     | -   | No  | Yes  |  |  |  |
| Remote On/Off                    | -   | Active Low  |  |  |  |  |
| Standby Input Power Draw         | W   | <0.5W   |  |  |  |  |
| 5V Standby (always on)           | -   | 5V 0.3A   |  |  |  |  |
| DC Good                          | -   | DC Good, open collector signal, High on Fail  |  |  |  |  |
| LED Indicator                    | -   | Green LED = On  |  |  |  |  |
| Output Remote Programming        | -   | See installation manual for details   |  |  |  |  |
| Operating Temperature            | °C  | -25 to +70°C. Derate linearly to 50% load from +50 to +70°C                                       | -25 <sup>(3)</sup> to +70°C. Derate linearly to 50% load from +50 to +70°C |  |  |  |
| Storage Temperature              | °C  | -30 to +85°C  |  |  |  |  |
| Operating Humidity               | -   | 30 - 90% RH (non condensing)  |  |  |  |  |
| Storage Humidity                 | -   | 10 - 95% RH (non condensing)  |  |  |  |  |
| Cooling                          | -   | Convection  | Internal fan   |  |  |  |
| Withstand Voltage                | -   | Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC <sup>(4)</sup> for 1 min. |  |  |  |  |
| Isolation Resistance             | -   | >100M at 25°C & 70%RH, Output to Ground 500VDC  |  |  |  |  |
| Vibration (non operating)        | -   | 10 - 55Hz: 19.6m/s <sup>2</sup> constant sweep 1 min X, Y, Z for 1 hour                           |  |  |  |  |
| Shock                            | -   | < 196.1 m/s <sup>2</sup> (20G)  |  |  |  |  |
| Immunity                         | -   | IEC61000-4-2 (lv 2, 3), -3 (lv3), -4 (lv 3), -5 (lv 3), -6 (lv 3), -8 (lv 4), -11                 |  |  |  |  |
| Safety Agency Approvals          | -   | UL60950-1, CSA C22.2 No 60950-1-07 (cUL), EN60950-1 2nd Edition, IEC60950-1, CE Mark              |  |  |  |  |
| Conducted & Radiated EMI         | -   | EN55022-B, FCC-B  |  |  |  |  |
| Weight (Typ)                     | g   | 850   | 1020   |  |  |  |
| Size (LxWxH in                   |     | 7.8 x 4.1 x 1.61"   | 8.6 x 4.1 x 1.61"  |  |  |  |
| Warranty                         | yrs | Five Years  |  |  |  |  |

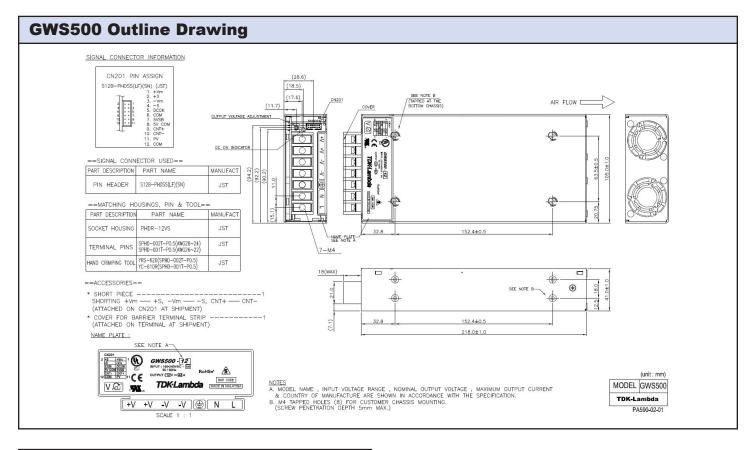
<sup>(1) 115 / 230</sup>VAC input

<sup>(2)</sup> Recycle AC, or use remote on/off to reset

<sup>(3)</sup> Guaranteed start up at -40°C

<sup>(4) 500</sup>VDC for GWS500

| Model Selector |                |                        |                       |                                   |                      |                      |                         |                                   |
|----------------|----------------|------------------------|-----------------------|-----------------------------------|----------------------|----------------------|-------------------------|-----------------------------------|
| Model          | Voltage<br>(V) | Adjust<br>Range<br>(V) | Max<br>Current<br>(A) | Peak Curr.<br><10s,<35%<br>DC (A) | Load<br>Reg.<br>(mV) | Line<br>Reg.<br>(mV) | Ripple<br>Noise<br>(mV) | Efficiency<br>(typ) %<br>(230VAC) |
| GWS250-12      | 12V            | 10.8 - 13.2            | 21                    | -                                 | 96                   | 48                   | 150                     | 92                                |
| GWS500-12      | 12V            | 10.8 - 13.2            | 42                    | -                                 | 96                   | 48                   | 150                     | 89                                |
| GWS250-24      | 24V            | 22 - 28.8              | 10.5                  | 12.5                              | 192                  | 96                   | 240                     | 92                                |
| GWS500-24      | 24V            | 22 - 28.8              | 21                    | 25.0                              | 192                  | 96                   | 150                     | 90                                |
| GWS250-36      | 36V            | 32 - 40                | 7                     | 8.4                               | 288                  | 144                  | 360                     | 93                                |
| GWS500-36      | 36V            | 32 - 40                | 14                    | 16.7                              | 288                  | 144                  | 200                     | 90                                |
| GWS250-48      | 48V            | 42 - 57.6              | 5.3                   | -                                 | 384                  | 192                  | 480                     | 93                                |
| GWS500-48      | 48V            | 42 - 57.6              | 10.5                  | -                                 | 384                  | 192                  | 300                     | 90                                |



| Other Industrial Products |  |  |  |  |
|---------------------------|--|--|--|--|
| LS25 - 200                | 25W to 200W low cost                   |  |  |  |
| HWS15 - 1800              | 15W to 1800W limited lifetime warranty |  |  |  |
| RWS-B                     | 50W to 600W single output              |  |  |  |
| CSS500                    | 360W to 500W medical                   |  |  |  |

For Additional Information, please visit us.tdk-lambda.com/lp/products/gws-series.htm

