



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



GWS500 Shown



Specifications		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)	A	20A at 115VAC, 40A at 230VAC	
Power Factor (1)	-	Meets EN61000-3-2 (Typical PF 0.98/0.95)	
Input Current (115/230VAC)	A	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 - 16.2V 24V: 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	<0.75mA	
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	

(1) 115 / 230VAC input

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

(3) Guaranteed start up at -40°C

(4) 500VDC for GWS500

\*Safety certified for AC input only



## Model Selector

Model	Voltage (V)	Adjust Range (V)	Max Current (A)	Peak Curr. <10s, <35% DC (A)	Load Reg. (mV)	Line Reg. (mV)	Ripple Noise (mV)	Efficiency (typ) % (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

## GWS500 Outline Drawing

**SIGNAL CONNECTOR INFORMATION**

CN201 PIN ASSIGN  
S12B-PH05S(LF)(SN) (JST)

1	+Vm
2	+S
3	-Vm
4	-S
5	DOCK
6	COM
7	SV2B
8	SV COM
9	CNT+
10	CNT-
11	PV
12	COM

==SIGNAL CONNECTOR USED==

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S12B-PH05S(LF)(SN)	JST

==MATCHING HOUSINGS, PIN & TOOL==

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-12VS	JST
TERMINAL PINS	SPHD-002T-P0.5(AWG28-24) SPHD-001T-P0.5(AWG26-22)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	JST

==ACCESSORIES==

- \* SHORT PIECE -----1  
SHORTING +Vm ---+S, -Vm --- -S, CNT+ --- CNT-  
(ATTACHED ON CN201 AT SHIPMENT)
- \* COVER FOR BARRIER TERMINAL STRIP  
(ATTACHED ON TERMINAL AT SHIPMENT)

NAME PLATE :

SEE NOTE A

SCALE 1 : 1

COVER (SEE NOTE B (TAPPED AT THE BOTTOM CHASSIS))

AIR FLOW →

7-M4

SEE NOTE B

18(MAX)

SEE NOTE B

NOTES

A. MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT & COUNTRY OF MANUFACTURE ARE SHOWN IN ACCORDANCE WITH THE SPECIFICATION.

B. M4 TAPPED HOLES (B) FOR CUSTOMER CHASSIS MOUNTING.  
(SCREW PENETRATION DEPTH 5mm MAX.)

(unit: mm)

MODEL GWS500

TDK-Lambda

PA590-02-01

## 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](http://us.tdk-lambda.com/lp/products/gws-series.htm)

