



- Standby Power Draw < 0.5 Watt
- Average Active Efficiency @ 230V: 92.7%
- ErP Compliant
- 41 mm height (1U compatible)
- Convection cooled
- 5V / 300mA Aux Supply
- Output Remote Programming
- Down to 25% Load: Class C Harmonics (IEC 61000-3-2)
- Allows Use in Lighting Equipment
- Five Year Warranty

GWS250 Series

Single Output 250W Power Supplies

Key Market Segments & Applications

Targets all ErP compliant applications
 Industrial, Traffic Controls, Automated Service, Kiosks
 Test & Measurement, Entertainment Systems,
 Communications & Broadcasting, LED Displays & Signage

GWS250 Features and Benefits

Features

- Convection Cooling
- Programmable Output Voltage
- Peak Power Capability 20% (24 & 36V models)
- High Efficiency - up to 93%

Benefits

- Easier System Integration, Low Accoustic Noise
- Broad Range of Applications
- Lower Cost, Smaller Size
- Easier System Cooling, Less Energy Used, High Reliability

Specifications

ITEMS	MODEL	GWS250
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
Temperature Coefficient	°C	<±0.02%/°C
Overcurrent Protection	-	>105% rated output power or >101% of peak output power
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 (240VAC 60hz)	mA	<0.75mA
Remote Sense	-	No
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°C to +70°C. Derate linearly to 50% load from +50°C to +70°C
Storage Temperature	°C	-30°C to +85°C
Operating Humidity	-	30 - 90% RH (non condensing)
Storage Humidity	-	10 - 95% RH (non condensing)
Cooling	-	Convection / Forced Air
Withstand Voltage	-	Input to FG 1.5kVAC (20mA), Input to Output 3kVAC (20mA), Output to FG 500VAC (100mA) for 1 min
Isolation Resistance	Ω	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)	-	10 - 55Hz: 19.6m/s ² Constant sweep 1 min X, Y, Z for 1 hour each
Shock	-	< 196.1 m/s ² (20G)
Immunity	-	Built to meet EN61000-4-2 (Level 2,3), -3 (Level 3), -4 (Level 3), -5 (Level 4), -6 (Level 3), -8 (Level 4), -11
Safety Agency Approvals	-	Approved by UL60950-1, CSA C22.2 No.60950-1-07 (2nd Edition), EN60950-1, IEC60950-1 (2nd Edition), CE
Conducted & Radiated EMI	-	Built to meet EN55022-B, CISPR22-B
Weight (Typ)	g	850
Size (L x W x H)	mm	198 x 105 x 41
Warranty	yrs	5

Notes: (1) 115 / 230VAC input (2) Recycle AC, or use remote on/off to reset

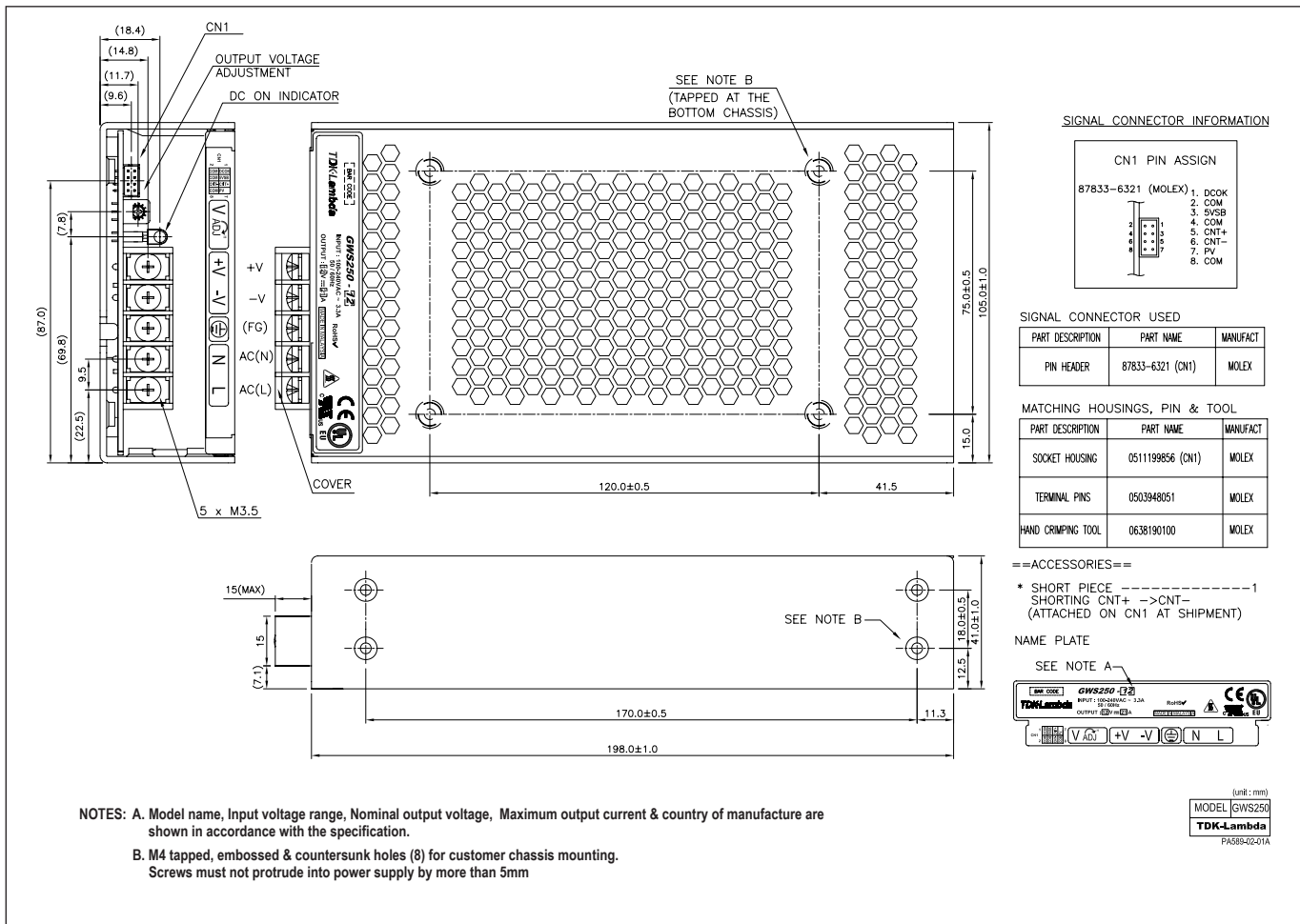


Model Selector

Model	Voltage (V)	Adjust Range (V)	Max Current (A)	Peak Curr ⁽¹⁾ <10s, Duty ≤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
GWS250-24	24V	22 - 28.8	10.5	12.5	192	96	240	92
GWS250-36	36V	32 - 40	7	8.4	288	144	360	93
GWS250-48	48V	42 - 57.6	5.3	-	384	192	480	93

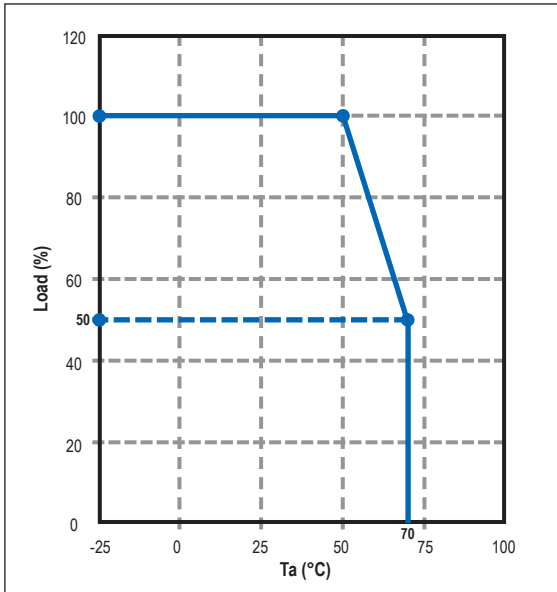
Notes: (1) Peak current 10seconds max. 35% duty cycle max.

Outline Drawing GWS250





Output Derating Curve GWS250



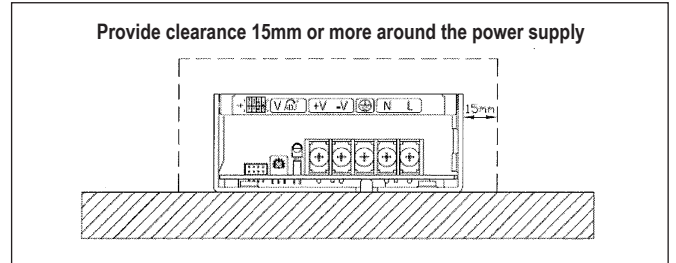
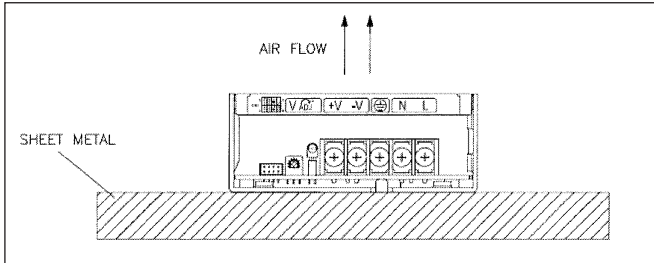
Options

Suffix Description

Suffix	Description
/T	OPT auto recovery after unit cools down
/RL	Remote ON/OFF reverse logic (Active High)
/BAT	Battery charging for 24V (21 -29V/8.8A) & 48V (42-58V/4.4A) only
/P	Power up to 350W with system airflow of 20cfm minimum and air blowing in from opposite side of input/output connectors
/L	Without cover

Notes: GWS250-XX/YYYYYYYYYYYY where **XX** can be 12, 24, 36, or 48
Y option can be any combination of P, L, RL, CO, CO2, T, BAT, or blank
Option Models available on request in the future

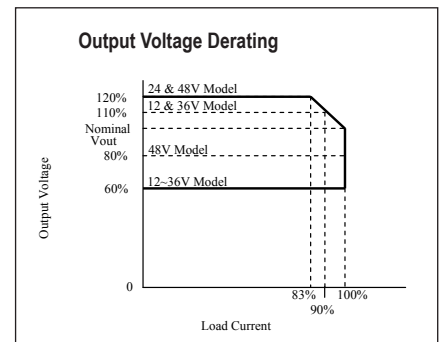
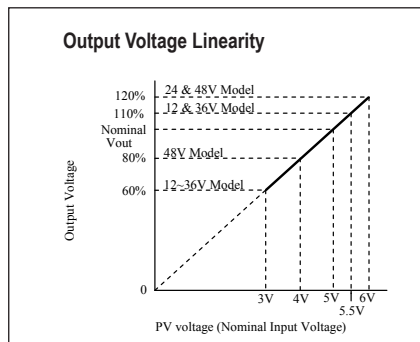
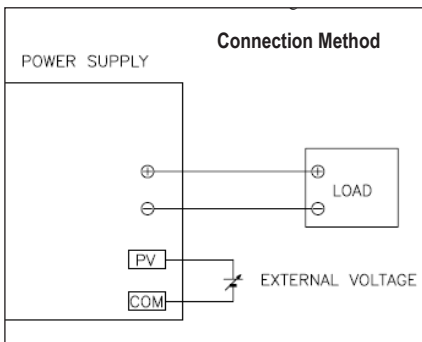
Mounting Specification GWS250



MOUNTING METHOD:

1. This is convection cooling type power supply. In consideration of the heat radiation and safety, please keep a distance of more than 15mm between the power supply and the peripheral parts. When lining up multiple units, please make sure to place them 15mm or more apart from each other.
2. Maximum allowable penetration of mounting screws into the power-supply is 5mm
3. Recommended torque for mounting screws (M4): 1.27Nm (13.0 kgf.cm)

GWS250 Output Voltage External Control (PV)



Output voltage external control function is available. Output voltage can be varied by applying an external voltage (3-6V) to PV terminal and COM terminal. Please consider the following characteristics.

Notes:

- For 12V & 36V output model, limit output voltage variation range at 60% - 110%. At PV voltage variation 3V - 5.5V
- For 24V output model, limit output voltage variation range at 60% - 120%. At PV voltage variation 3V - 6V
- For 48V output model, limit output voltage variation range at 80% - 120%. At PV voltage variation 4V - 6V



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LOCAL DISTRIBUTION

