

250Watts

- Exceptional small size
- Gallium nitride switch technology
- IEC/EN/UL 62368-1
- EN55032 Level B conducted & radiated
- Class I (C14) or II (C18)
- Single outputs 12 to 56V
- 5 Year warranty



The GDA250 range of external AC-DC power adapters offer a class leading power density of 11W/in³, approximately 2.3 x smaller. They are compliant with the latest safety standard IEC/EN/UL 62368-1. The units offer 228-250 watts of output power with output voltages available between 12 and 56VDC. The range is reliable, cost competitive, and comes with an impressive FIDUS 5 year warranty.

Dimensions:

6.81 x 2.63 x 1.26" (173 x 67 x 32mm)

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output Voltage	Output Current
GDA25012-C14	228W	12V	19.0A
GDA25019-C14	250W	19V	13.2A
GDA25024-C14	250W	24V	10.4A
GDA25048-C14	250W	48V	5.2A
GDA25056-C14	250W	56V	4.48A

Notes

1. For C18 version please change -C14 for -C18
2. Alternative output connectors available for production quantities.
3. For UK/ US/ EU mains power cable please order UK-C18/14, US-C18/14 or EU-C18/14 separately

Key specifications

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
AC Input range	90		264	VAC	Derate from 100% at 100VAC to 90% at 90VAC
Operating temperature	-20		60/70	°C	See derating curve page 2
Efficiency	88		95	%	DOE Level VI, Energy Star, ErP tier 2, Coc tier2 GEMS and NRcan compliant
Dimensions	6.81 x 2.63 x 1.26" (173 x 67 x 32mm)				
EMC	EN55032 Level B conducted and radiated. EN61000-3 and EN61000-4, harmonics, flicker, surge, EFT, ESD, conducted and radiated immunity				

Safety Approvals

	Safety standard	Notes & Conditions
UL	UL62368-1	
CB	IEC62368-1	PSE
CE	EN62368-1	2015/863/EU RoHS Directive and MDD
Equipment protection class		Class I or II (please choose C14 or C18 respectively)

Input

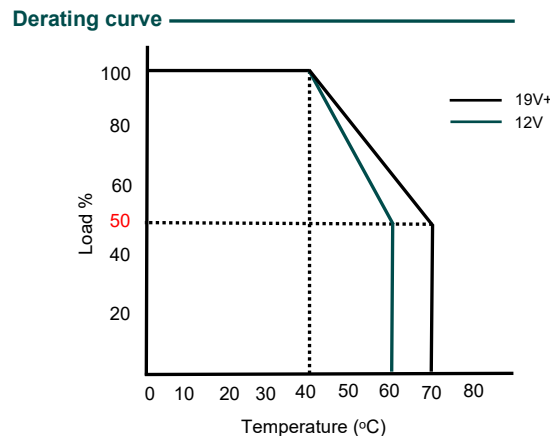
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Input voltage	90		264	VAC	Derate from 100% at 100VAC to 90% at 90VAC
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current	1.1		3.3	A	
Inrush current			120	A	High line. Full load, 25°C cool start, Vin=230VAC
No load input power			0.21	W	230VAC

Output

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Output voltage	12		56	VDC	
Total regulation			±5	%	Includes set accuracy, line & load regulation.
Minimum load	0			%	
Transient response		0.5		mS	50% load change
Ripple & Noise		1		%Pk-Pk	All models measured with 10uF and 0.1uF capacitor. 20 MHz bandwidth
Hold up time	10			ms	At full load
Overload protection	170		180	%	Automatic recovery
Short circuit protection					Automatic recovery
Over voltage protection			150	%	Latch off reset
Over temperature protection					Latch off reset

Environmental

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating temperature	-20		60/70	°C	See derating curve below
Storage temperature	-20		80	°C	
Cooling					Convection cooled
Operating Humidity	20		80	% RH	
Storage Humidity	10		90	% RH	



GDA250 Series

General

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency	88		95	%	DOE Level VI, Energy Star, ErP tier 2, Coc tier2 GEMS and NRcan compliant
Isolation	Input to Output: 3000			VAC	For 1 minute, Input to ground 1770VAC
Insulation resistance		10		MOhm	500Vdc
Power density			11.1	W/In ³	
MTBF	300			kHrs	As per Telcordia SR-332
Weight		855		g	
Switching Frequency		250		kHz	

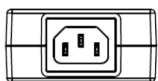
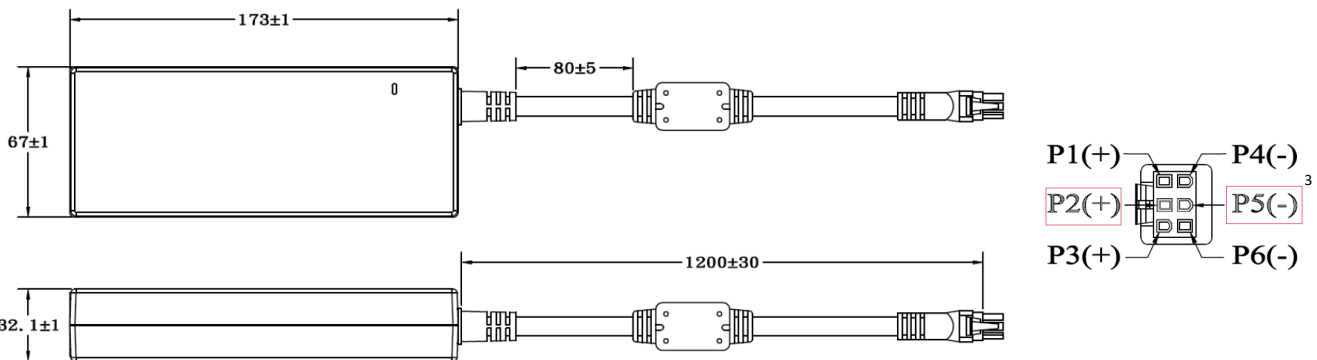
EMC: Emissions

	Standard	Test level	Criteria	Notes & Conditions
Conducted	EN55032	B		
Radiated	EN55032	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

EMC: Immunity

	Standard	Test level	Criteria	Notes & Conditions
ESD	EN61000-4-2	2/3	A	Contact: 4kV, Air: 8kV
Radiated	EN61000-4-3	2	A	3V/m
EFT	EN61000-4-4	3	A	2kV
Surges	EN61000-4-5	Installation Class 3	A	Line to Neutral 1kV, Line/Neutral to PE 2kV
Conducted	EN61000-4-6	2	A	3Vrms
PFMF	EN61000-4-8	1	A	1A/m
Dips and interruptions	EN61000-4-11	>95% interruption 250 periods, >95% dip 0.5 periods, 30% dip 25 periods. Perf criteria: B,A,A		

Mechanical Details



FRONT-VIEW

For UK/ US/ EU mains power cable please order UK-C18, US-C18 or EU-C18 separately

Notes

- All dimensions in mm
- Output connector : Molex 6pin Mini-fit 4.2mm, mates with 26013116
- AWG16 6C for 12V, AWG16 4C for 19-24V, AWG18 4 Core for 48 & 56V