FidusPower

GDM300 SERIES

300W EXTERNAL

DIMENSIONS:

C14 - 7.2 x 3.35 x 1.38" (183 x 85 x 35mm)
C18 - 7.2 x 3.35 x 1.38" (183 x 85 x 35mm)

COMPACT SIZE | **CLASS I OR II** | **2 x MOPP**

EN55011 LEVEL B | **CONNECTOR CUSTOMISATION** | **UP TO 95% EFFICIENT**

Part numbers

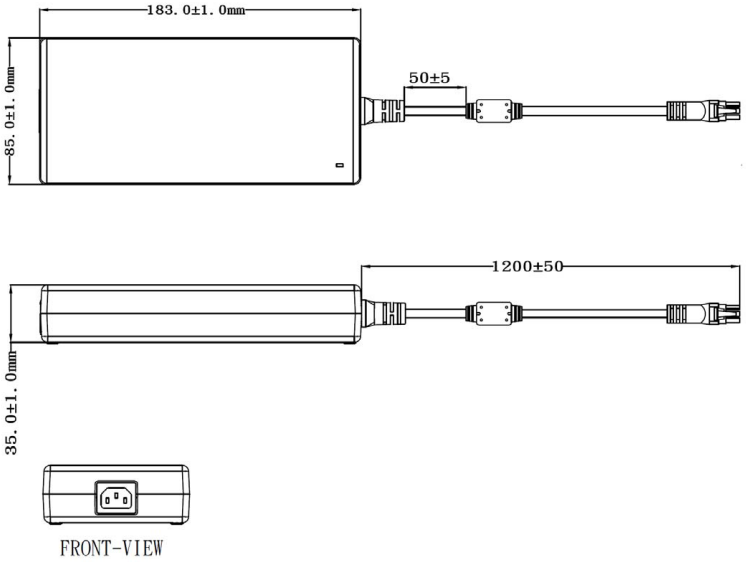
GDM	300	12	-	C14
Series	Power (W)	Output voltage		Options
		12 = 12VDC 15 = 15VDC 19 = 19VDC 24 = 24VDC 48 = 48VDC 56 = 56VDC		-C14 inlet -C18 inlet

Key specifications

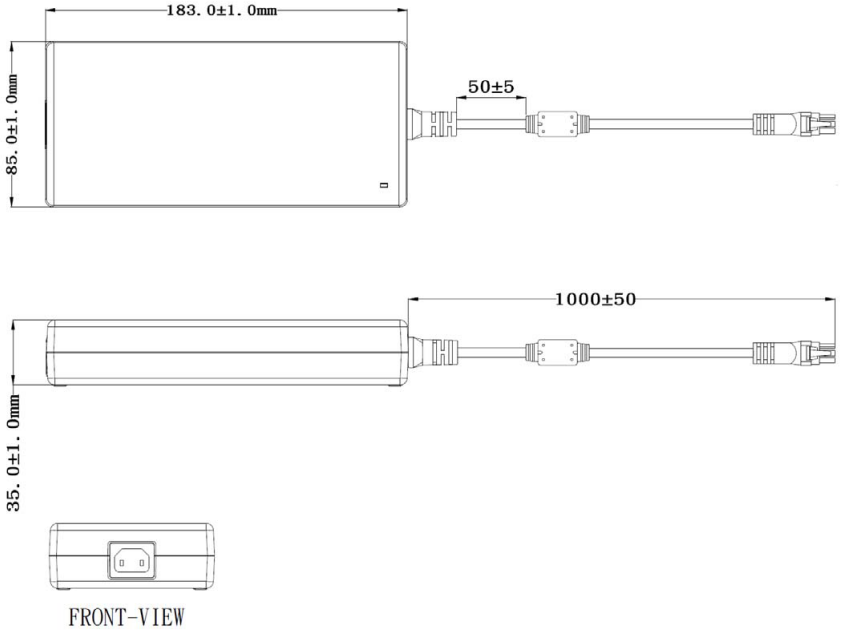
Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 62368-1	<95%	Operational: -20 to 60°C

Mechanical

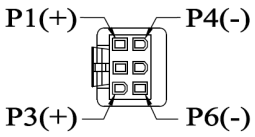
C14 Version



C18 Version



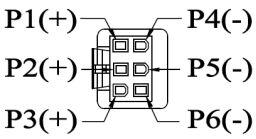
24-56V



Notes
1. All dimensions in mm 2. Output connector : Molex 6pin mini-fit, Pitch 4.2mm, mates with 26013116 3. C14 Shown. 4. UL2464 output cable for 12, 15, 19V units is reduced to 1000mm for energy efficiency. AWG16 6 Core 12V-19V, AWG18 4C 24V, AWG18 6 Core for 48V AWG18 4C 56V

Weight	1050g

12-19V



For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately

Models & Ratings

Model Number(1)	Output Power	Output voltage	Output current
GDM30012-C14	288W	12V	24.0A
GDM30015-C14	300W	15V	20.0A
GDA30019-C14	300W	19V	15.79A
GDM30024-C14	300W	24V	12.5A
GDM30048-C14	300W	48V	6.25A
GDM30056-C14	300W	56V	5.36A

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

Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	85		264	VAC	Derate from 100% at 100VAC to 85% at 85VAC. See derating curve on page 5
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)	1.5		3.9	A	
Inrush current			150	A	High line. Full load, 25°C cool start, Vin=230VAC
No load input power			0.5	W	230VAC

Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	12		56	VDC	±5% accuracy
Total regulation			±5	%	
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
Leakage current			0.25	mA	

Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload			180	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection			150	%	Latch off reset

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 60601-1				
Isolation	Input to Output: 4000			VAC	For 1 minute. Input to ground 1500 VAC
Insulation resistance		10		MOhm	500Vdc input to output
Power density			9	W/In3	

EMC: Emissions

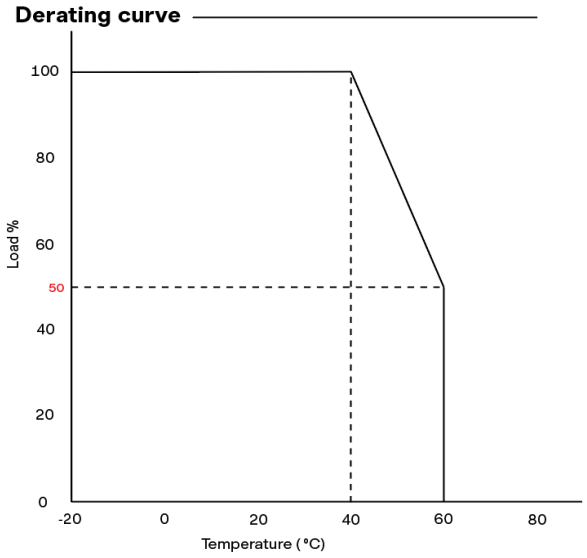
	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55011	B		
Radiated	EN55011	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

EMC: Immunity

	Standard	Test level	Criteria	Notes/Conditions
ESD	EN61000-4-2	4	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	3	A	3Vrms, 6Vms for ISM bands
PFMF	EN61000-4-8	4	A	30A/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		

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-20		60	°C	See derating curve below
Storage temperature	-20		80	°C	
Cooling					Convection cooled
Operating humidity	20		80	% RH	
Storage humidity	10		90	% RH	
MTBF	300			kHrs	As per Telcordia SR-332



10th January 2024