



## GDM450 SERIES



450W EXTERNAL

DIMENSIONS:



10 x 4.57 x 1.85"  
(254 x 116 x 47mm)



COMPACT SIZE

0.5W NO-LOAD

2 x MOPP

EN55032 LEVEL B

CONNECTOR  
CUSTOMISATION

UP TO 94% EFFICIENT

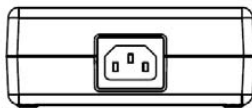
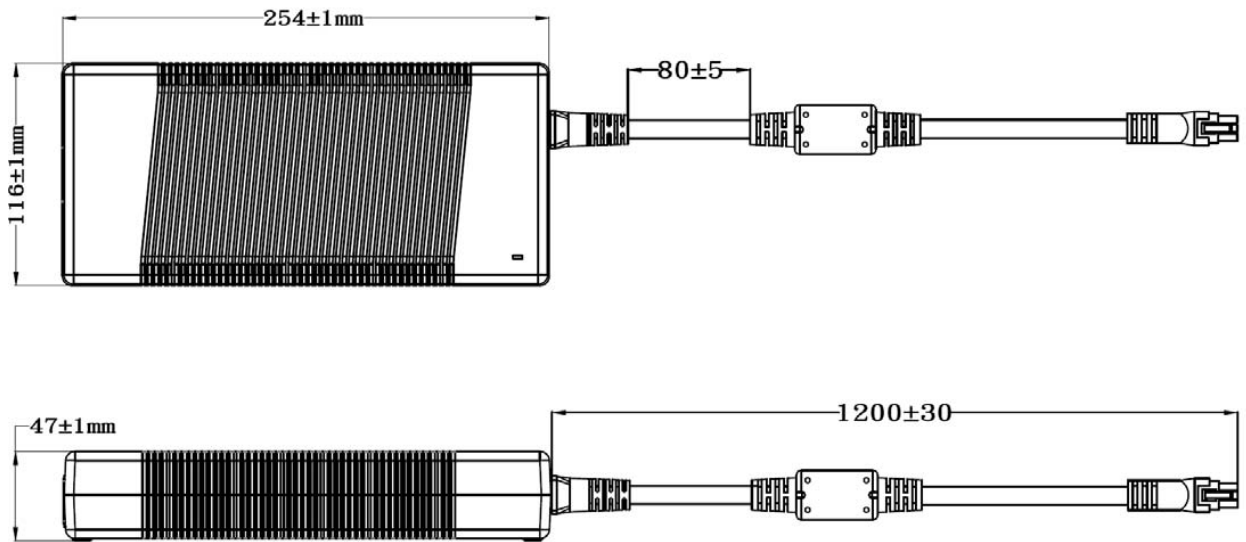
### Part numbers

GDM	450	12	-	C14
Series	Power (W)	Output voltage		Options
		12 = 12VDC 24 = 24VDC 48 = 48VDC 56 = 56VDC		C14 inlet

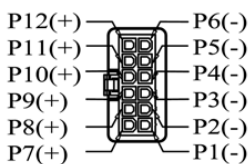
### Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	IEC/EN 60601-1	<94%	Operational: -20 to 60/70°C

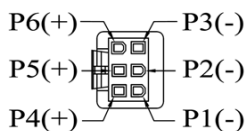
### Mechanical



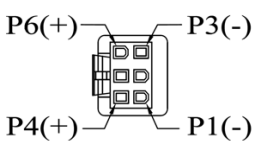
FRONT-VIEW



12V Molex mini fit Jr 39-01-2120



24V Molex mini fit Jr 39-01-2060



48-56V Molex mini fit Jr 39-01-2060

### Notes

1. All dimensions in mm
2. Output connector : Molex mini fit
3. Negative DC output floating
4. UL2464 cable; 12V AWG18 12C (0.8M), 24V AWG16 6C (1M), 48V-56V AWG18 4C (1.2M)

### Weight

1600g

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### Models & Ratings

Model Number <sup>(1)</sup>	Output Power	Output voltage	Output current
GDM45012-C14	400W	12V	33.34A
GDM45024-C14	450W	24V	18.75A
GDM45048-C14	450W	48V	9.38A
GDM45056-C14	450W	56V	8.05A

1. Alternative output connectors available for production quantities. Contact sales for details.  
 2. 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	90		264	VAC	See derating curve pg 5
Input frequency	50		60	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)	2.2		5.3	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			%	
Ripple & noise			1	%Pk-Pk	All models measured with 10uF and 0.1uF capacitor. 20 MHz bandwidth

### Protections

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

### Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	ES/IEC/EN 60601-1				
Isolation	Input to Output: 4000, Input to Ground: 1770			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density			5.32	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: 8kV, Air: 15kV
Radiated	EN61000-4-3	3	A	3V/m -28V/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	6Vrms
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		60/70	°C	See derating curve below
Storage temperature	-20		80	°C	
Cooling					Convection cooled
Operating humidity	20		80	% RH	
Storage humidity	10		90	% RH	

