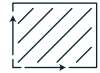


## MDA160 SERIES



160W EXTERNAL

DIMENSIONS:



3.19 x 7.2 x 1.65"  
(81 x 183 x 42mm)



COMPACT SIZE

IEC 60601-1

LEVEL VI

EN55011 LEVEL B

CONNECTOR  
CUSTOMISATION

ErP STAGE 2

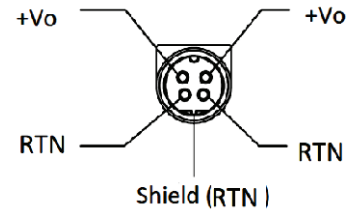
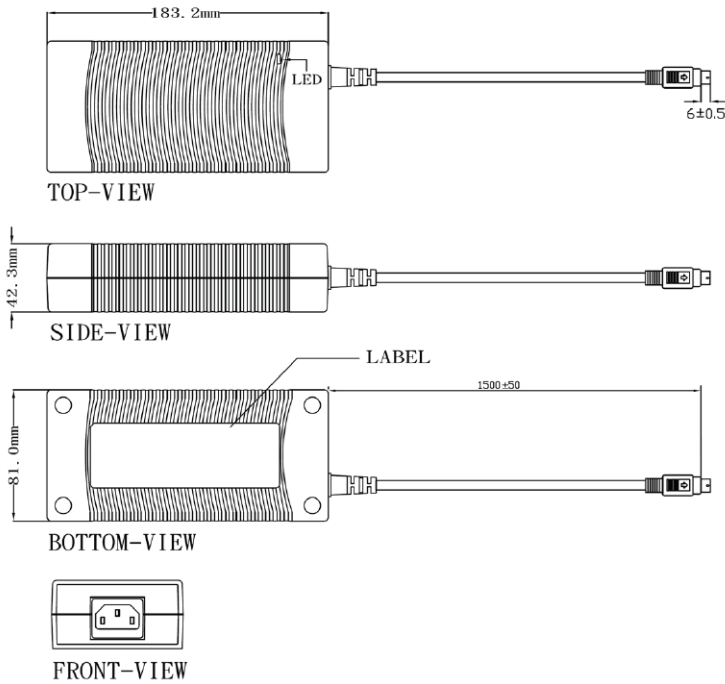
### Part numbers

MDA	160	12	-	C14
Series	Power (W)	Output voltage		Options
		12 = 12VDC 19 = 19VDC 24 = 24VDC 48 = 48VDC		-C6 inlet -C14 inlet

### Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 60601-1	>88%	Operational: 0 to 70°C

### Mechanical



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

#### Notes

1. All dimensions in mm
2. Output connector: Kycon 4 pole power adapter, mates with board mount KPJX, panel mount KP-JX-PM and cable mount KPJX-CM
3. Negative DC output is floating
4. Output cable for 12V-15V AWG16 1200mm long, 19V-48V AWG16 1500mm long

#### Weight

820g

### Models & Ratings

Model Number <sup>(1)</sup>	Output Power	Output voltage	Output current
MDA16012-C14	150W	12V	12.50A
MDA16019-C14	160W	19V	8.40A
MDA16024-C14	160W	24V	6.60A
MDA16048-C14	160W	48V	3.30A

1. C6 inlet available change -C14 for -C6
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	90		264	VAC	100-240VAC nominal. See derating curve on page 5
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)	0.9		1.8	A	
Inrush current			100	A	High line. Full load, 25°C cool start, Vin=230VAC
No load input power			0.21	W	230VAC

### Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	12		48	VDC	±5% accuracy
Total regulation		±5%		%	
Minimum load	0			%	
Transient response		0.5		mS	50% load change
Ripple & noise		2		%Pk-Pk	All models measured with 10uF and 0.1uf capacitor. 20 MHz bandwidth
Hold up time	10			mS	At full load

### 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	UL/IEC/EN 60601-1				
Isolation	Input to Output: 4000			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density			4.22	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,A	Contact: 8kV, Air: 15kV
Radiated	EN61000-4-3	3	A	3-28V/m, 80MHz-2700MHz, 1kHz 80% AM modulation
EFT	EN61000-4-4	3	A	2kV 100KHz
Surges	EN61000-4-5	Installation class 3	A	Line to Ground 2kV, Line to Neutral 1kV both at 0°, 90°, 180°, 270°
Conducted	EN61000-4-6	3	A	3/6Vrms, 1KHz 80 AM modulation 150KHZ-80MHz
PFMF	EN61000-4-8	4	A	30A/m
Dips and interruptions	EN61000-4-11	100% for 0.5 & 1 cycle, 30% for 25 cycles: 240VAC B,B,B, 100VAC B,B,C, interrupt 250,300 cycles and 30% for 30 cycles: 240VAC C,C,B, 100VAC C,C,C		

### Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	0		70	°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

Derating curve

