

EPA12 SERIES



12W EXTERNAL

DIMENSIONS:



US: 2.83 x 1.34 x 2.32" (72 x 34 x 59mm)
 EU: 2.83 x 1.34 x 3.15" (72 x 34 x 80mm)
 UK: 2.83 x 1.97 x 2.80" (72 x 50 x 71mm)
 CN: 2.83 x 1.34 x 2.28" (72 x 34 x 58mm)
 AU: 2.83 x 1.57 x 2.72" (72 x 40 x 68mm)

LEVEL VI EFFICIENCY

CONNECTOR
CUSTOMISATION

EN55032 LEVEL B

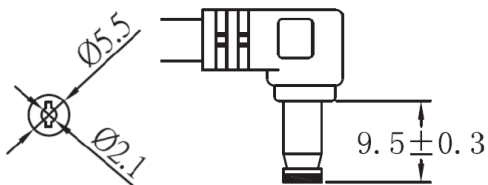
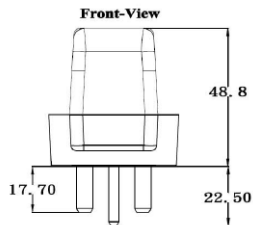
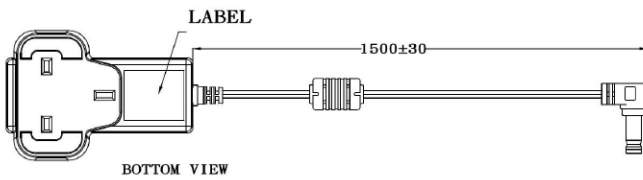
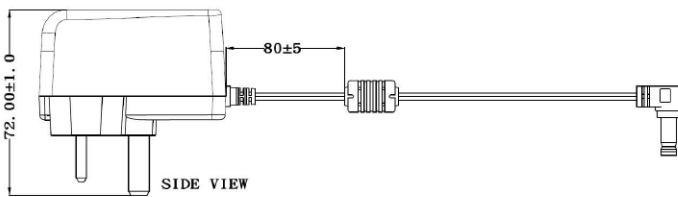
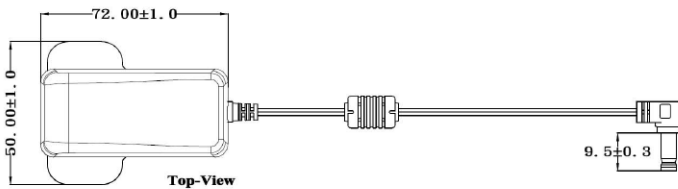
Part numbers

EPA	12	12	-	UK
Series	Power (W)	Output voltage		Options
		03 = 3.3VDC 05 = 5VDC 09 = 9VDC 12 = 12VDC 15 = 15VDC 18 = 18VDC 24 = 24VDC		-UK -US -EU -CN -AU

Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 62368-1	<83%	Operational: 0 to 70°C

Mechanical



Notes

1. All dimensions in mm
2. Output connector : 2.1 / 5.5 / 9.5mm tuning fork style
3. UL2468 AWG20 5V units only & AWG22 for 3V & 7V-24V units

Weight

UK	US	EU	CN	AU
130g	126g	128g	126g	126g



Models & Ratings

Model Number ⁽¹⁾	Output Power	Output voltage	Output current
EPA1203-UK	6.6W	3.3V	2A
EPA1205-UK	10W	5V	2A
EPA1209-UK	10.8W	9V	1.2A
EPA1212-UK	12W	12V	1A
EPA1215-UK	12W	15V	0.8A
EPA1218-UK	12W	18V	0.67A
EPA1224-UK	12W	24V	0.5A

1. For US plug -US, EU plug -EU, AU plug -AU, CN plug -CN

2. Output connector: Tuning fork style 5.5/2.1/9.5mm

3. UL2468 DC cord: 3.3V AWG16, 5V-9V AWG20, 12V-24V AWG22



Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	90		264	VAC	No derating
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)			0.31	A	
Inrush current			60	A	High line. Full load, 25°C cool start, Vin=240VAC
No load input power			0.075	W	230VAC



Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	3.3		24	VDC	Other output options available
Total regulation		±10		%	
Minimum load	0			%	
Transient response		0.5		mS	50% load change
Ripple & noise		3		%Vp-p	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		250		%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection		180		%	Latch off reset

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 62368-1				
Isolation	Input to Output: 3000			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density	0.38		1.36	W/In3	

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, 80MHz-1000MHz, 1kHz 80% AM modulation
EFT	EN61000-4-4	2	A	1kV Line - Neutral
Surges	EN61000-4-5	Installation class 3	A	1KV Line to Neutral both at 0°, 90°,180°,270°
Conducted	EN61000-4-6	2	A	3Vrms, 1kHz 80% AM modulation 150kHz-80MHz
PFMF	EN61000-4-8	1	A	1A/m
Dips and interruptions	EN61000-4-11	Interrupt 250, 300 cycles, 95% for 0.5/0.6 cycles, 30% for 25/30 cycles B,A,A		

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

