

25 Watts

- US DoE Energy efficiency level VI
- Interchangeable input plugs
- Class II
- Single outputs 5 to 48V
- Universal input
- 5 Year warranty



The EPT25 range of wall plug adaptors are compliant with the latest energy efficiency Level VI standard. The units offer 25 watts of output power in a compact, encapsulated package with output voltages available between 5 and 48VDC. The EPT25 caters for customers working within global markets, accepting universal AC input and providing interchangeable mains plugs. The range is cost competitive and comes with an impressive FiDUS 5 year warranty.

Dimensions:

2.95 x 1.71 x 1.58" (75.0 x 43.5 x 40.2mm)

Models & Ratings

SELECT YOUR CONNECTOR PG5

Model Number ⁽¹⁾	Output Power	Output voltage	Output Current	Efficiency
EPT2505	16.5W	5V	3.3A	82%
EPT2507	20W	7V	2.85A	85.5%
EPT2509	22W	9V	2.44A	85.9%
EPT2512	25W	12V	2.08A	86.35%
EPT2515	25W	15V	1.66A	86.35%
EPT2518	25W	18V	1.38A	86.35%
EPT2524	25W	24V	1.04A	87%
EPT2528	25W	28V	0.89A	87%
EPT2536	25W	36V	0.69A	88%
EPT2548	25W	48V	0.52A	88%

Notes

1. Add plug indicator suffix to the part number for pre-fitted mains plug. See mechanical details pg.4. E.g. EPT2505-UK for UK plug fitted. –All for all plugs

2. Various output connectors available. Contact sales.

Key specifications

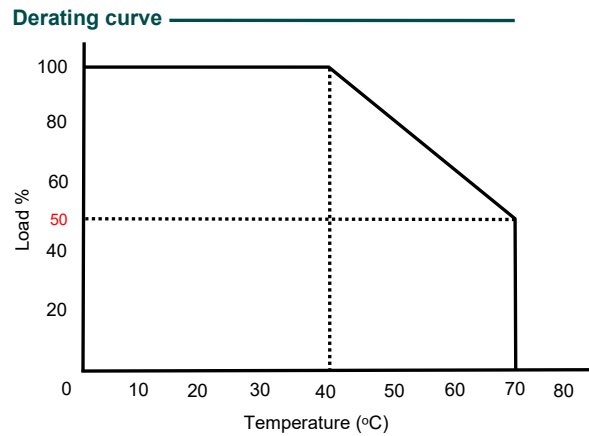
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
AC Input range	90		264	VAC	No derating
Operating temperature	0		70	°C	De-rate linearly from 100% load at 40°C to 50% load at 70°C
Efficiency	82		88	%	
Dimensions	2.95 x 1.71 x 1.58" ±0.04 (75.0 x 43.5 x 40.2mm ±1.0)				
EMC	EN55022 Level B Conducted and Radiated. EN61000-3 and EN61000-4, harmonics, flicker, Surge, EFT, ESD, conducted and radiated,				
Safety	UL60950-1, CSA22.2 60950 No 234 as per cUL, IEC/EN60950-1 A2 2013, CE				

Input					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Input voltage	90		264	VAC	No derating
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current			0.7	A	Low line. Full load, Vin=100VAC
			0.4		High line. Full load, Vin=240VAC
Inrush current	25		50	A	Low line. Full load, 25°C cool start, Vin=100VAC
	50		100		High line. Full load, 25°C cool start, Vin=240VAC
No load input power			0.1	W	
Earth leakage current					Class II construction

Output					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Output voltage	5		48	VDC	
Line regulation	0.5		1	%	Full load, Vin=100 to 120VAC. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load
Load regulation	3		5	%	Vin=230VAC, 10 to 90% load change at condition. Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load
Minimum load	0			%	
Time of Transient response			4	ms	Full load, Vin=110VAC
Ripple & Noise	5V output 60mVp-p. 7V output 80mVp-p. 9 and 12V output 100mVp-p. 15V output 120mVp-p. 18V output 130mVp-p. 24 and 28V output 200mVp-p. 36V output 250mVp-p. 48V output 300mVp-p.			mVp-p	All models measured with 47uF capacitor. 20 MHz bandwidth.
Hold up time	12			ms	
Overload protection					Output protected to short circuit conditions
Short circuit protection					Automatic recovery

General					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency	82		88	%	See models & Ratings table
Isolation		3000		VAC	Input to Output
Switching frequency		65		kHz	
Power density			3.1	W/In ³	
MTBF	100			KHrs	As per MIL-HDBK-217F, 25°C GB
Weight		200		g	

Environmental					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating temperature	0		70	°C	Derate linearly from 100% load at 40°C to 50% load at 70°C
Storage temperature	-40		85	°C	
Cooling					Convection cooled
Temperature coefficient			±0.04	%/°C	
Humidity			95	% RH	
Vibration			5	G	10 ~ 500Hz, 10min/1cycle, 60min. each along X, Y,



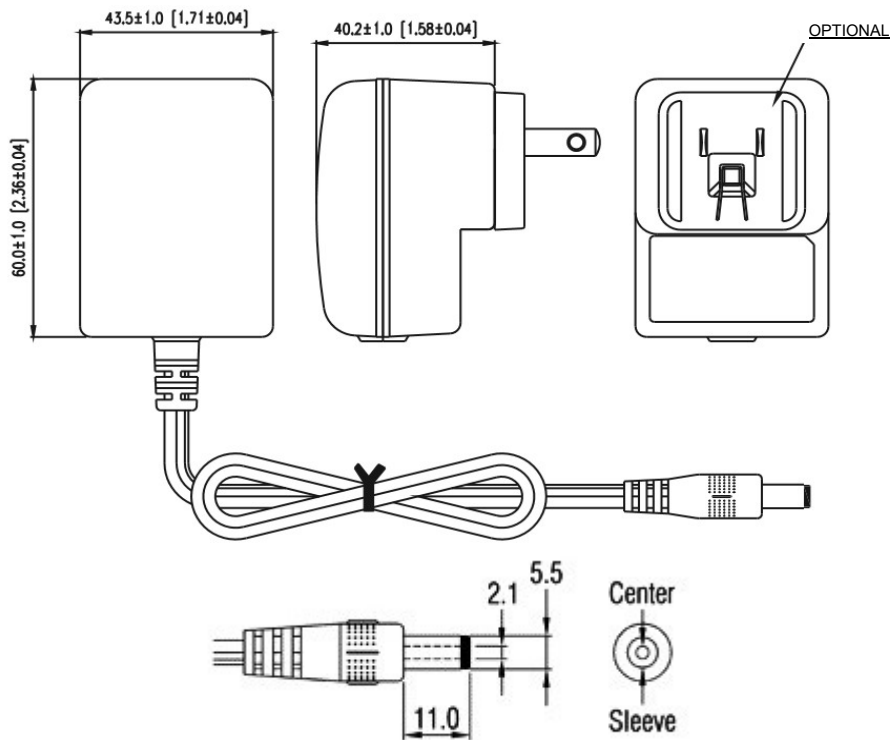
EMC: Emissions				
	Standard	Test level	Criteria	Notes & Conditions
Conducted	EN55022	B		
Radiated	EN55022	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

EMC: Immunity				
	Standard	Test level	Criteria	Notes & Conditions
ESD	EN61000-4-2	2/3	A	Level 2 for Contact, Level 3 for Air
Radiated	EN61000-4-3	2	A	
EFT	EN61000-4-4	2	A	
Surges	EN61000-4-5	Installation Class 3	A	
Conducted	EN61000-4-6	2	A	
Dips and interruptions	EN61000-4-11	95% interruption 250periods, 30% dip 25 periods, 95% dip 0.5 periods. Perf criteria C,A,A		

Safety Approvals

	Safety standard	Notes & Conditions
UL	UL60950-1, CSA 22.2 60950-1 No 234 as per cUL	
CB	IEC60950-1 2005 +A2:2013	
CE	EN60950-1 2006 + A2:2013	2011/65/EU RoHS Directive and 2006/95/EC Low voltage directive
Equipment protection class		Class II

Mechanical Details



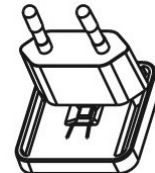
Mains plug options



UK—add suffix '-UK'



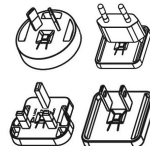
USA—add suffix '-US'



EU—add suffix '-EU'



Australia —add suffix '-AU'

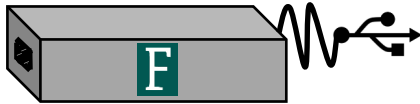


All-add suffix '-ALL'

Notes

1. All dimensions in mm (inches)
2. Output connector : Barrel female plug: OD: 5.5mm, ID: 2.1mm, L: 11mm. Others available for production quantities, contact sales
3. 5-24V use AWG18 4ft, the remainder use AWG20 4ft

Connector Selector



The EPT25 series is available with an range of output connectors, allowing customers to use the connector that best fits their industry and product.

- + Rapid prototypes for evaluation
- + Available for high & low volume applications

EPT25 SERIES - [CONNECTOR SELECTOR]

	Universal Simple	5.5mm/2.5mm Straight Barrel Jack (11mm length)			All models	-P01N
	Universal Simple	5.5mm/2.1mm Straight Barrel Jack (9.5mm length)			All models	-P01J
	Universal Simple	5.5mm/2.5mm Straight Barrel Jack (9.5mm length)			All models	-P01M
	Compact Tidy	5.5mm/2.1mm Right Angle Jack (11mm length)			All models	-P02K
	Compact Tidy	5.5mm/2.5mm Right Angle Jack (9mm length)			All models	-P02M
	Friction locking	DIN-5 plug Friction locking Male			All models	-P05B
	Friction locking	DIN-4 plug friction locking Male			All models	-P09B
	Modern Recognisable	Micro USB Male			15-48V models	-P88D
	Locking Unique	Molex 43025-0600 or CVILUX CP35006S0010			All models	-P35C

Still can't find your ideal connector? Contact sales for assistance
+44 (0)1183 420 730 sales@fiduspower.com