

40 Watts

- US DoE Energy efficiency level VI
- EU CoC Tier 2 requirements
- EN55022 Level B conducted & radiated
- Class I
- Single outputs 5 to 48V
- Low profile
- 5 Year warranty



Green

Dimensions:

1.85 x 4.21 x 1.19" (47.0 x 107.0 x 30.1mm)

The EDT40 range of external AC-DC power adapters are compliant with the latest energy efficiency Level VI standard. The units offer 40 watts of output power in a slim package with output voltages available between 5 and 48VDC. The range is reliable, cost competitive, and comes with an impressive FiDUS 5 year warranty.

SELECT YOUR CONNECTOR PG5

Models & Ratings

Model Number	Output Power	Output voltage	Output Current	Efficiency
EDT4005	25W	5V	5A	86%
EDT4007	30W	7V	4.28A	88%
EDT4009	35W	9V	3.88A	88%
EDT4012	40W	12V	3.33A	89%
EDT4015	40W	15V	2.66A	89%
EDT4018	40W	18V	2.22A	89%
EDT4024	40W	24V	1.66A	90%
EDT4028	40W	28V	1.42A	90%
EDT4036	40W	36V	1.11A	90%
EDT4048	40W	48V	0.83A	91%

Notes

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

Key specifications

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
AC Input range	90		264	VAC	No derating
Operating temperature	0		70	°C	Derate linearly from 100% load at 40°C to 50% load at 70°C
Efficiency	86		91	%	
Dimensions	1.85 x 4.21 x 1.19" ±0.04 (47.0 x 107.0 x 30.1mm ±1.0)				
EMC	EN55022 Level B Conducted and Radiated. EN61000-3 and EN61000-4, harmonics, flicker, Surge, EFT, ESD, conducted and radiated,				
Safety	IEC 60950-1:2005 /A2:2013, UL 60950-1: 2nd edition, EN60950-1:2006 /A2:2013, IEC62368-1 Ed 2 +A11, CE				

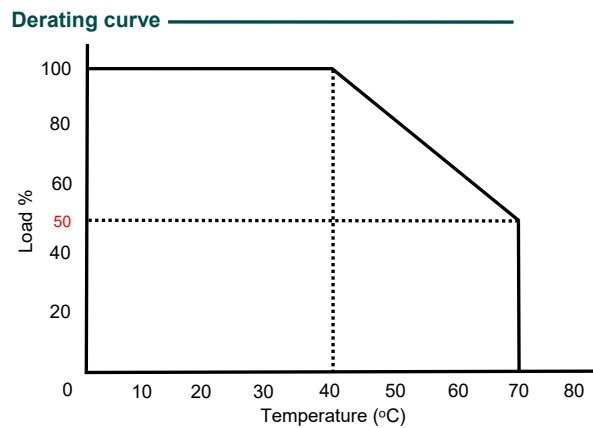
Input					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Input voltage	90		264	VAC	No derating
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current			0.93	A	Low line to high line
Inrush current			45	A	Low line. Full load, 25°C cool start, Vin=100VAC
			90		High line. Full load, 25°C cool start, Vin=240VAC
No load input power			0.075	W	
Earth leakage current			0.75	mA	240VAC 60Hz Class I construction

Output					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Output voltage	5		48	VDC	
Total regulation	±2		±5	%	Includes set accuracy, line & load regulation. ≤18V: ±5%, 24-36V: ±3%, 48V: ±2%
Line regulation	0.5		1	%	Full load, Vin=100 to 120VAC. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load
Load regulation	4		5	%	Vin=230VAC, 10 to 90% load change at condition. Load regulation is defined by changing ±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 50mVp-p. 7V output 65mVp-p. 9V output 80mVp-p. 12 to 48V output 100mVp-p.			mVp-p	All models measured with 47uF capacitor. 20 MHz bandwidth
Hold up time	10			ms	
Overload protection					Output protected to short circuit conditions
Short circuit protection					Automatic recovery

General					
Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency	86		91	%	See models & Ratings table
Isolation	Input to Output: 3000, Input to Ground: 1500			VAC	
Switching frequency		65		kHz	
Power density			4.3	W/In ³	
MTBF	100			KHrs	As per MIL-HDBK-217F, 25°C GB
Weight	265		280	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	



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			

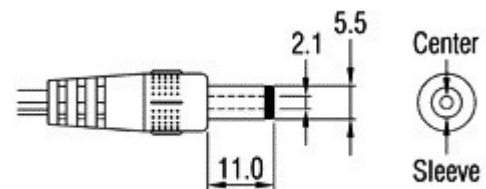
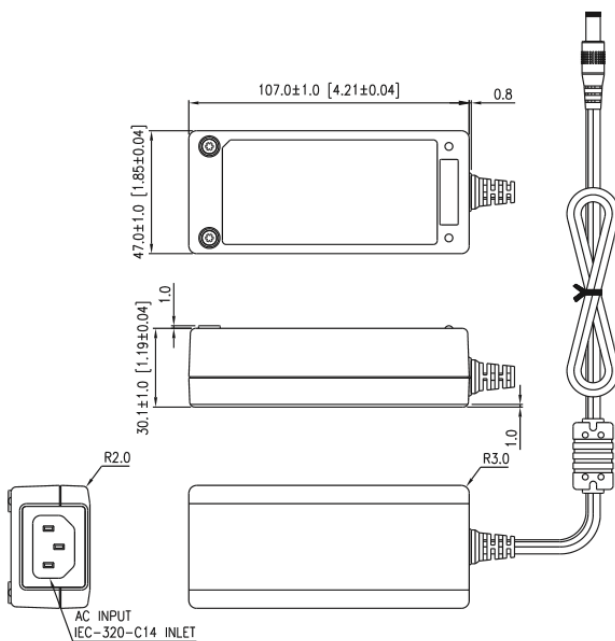
EMC: Immunity

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

Safety Approvals

	Safety standard	Notes & Conditions
UL	UL 60950-1: 2nd edition	
CB	IEC 60950-1:2005 /A2:2013, IEC62368-1 Ed 2 +A11	
TUV	EN60950-1:2006 /A2:2013	
CE		2011/65/EU RoHS Directive and 2014/35/EU Low voltage directive
Equipment protection class		Class I

Mechanical Details

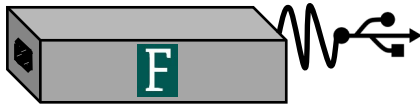


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Notes

1. All dimensions in mm (inches)
2. Output connector : Barrel female plug: OD: 5.5mm, ID: 2.1mm, L: 11mm. Other connectors available for production quantities, contact sales
3. 5-9V units use AWG14 4FT, 12-15V units use AWG16 4FT others use AWG18 6FT
4. Negative DC output is floating, For earth bonded negative DC output please contact sales

Connector Selector



The EDT40 series from FiDUS Power is available with a wide range of standard output connector options, allowing customers the flexibility to use the connector that best fits their industry and product type.

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

EPT40 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

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