EDT150 Series

FiDUS
power in motion...

150 Watts

- US DoE Energy efficiency level VI
- EN55032 Level B conducted & radiated
- Class I or II models
- Single outputs 12 to 48V
- Low profile
- 3 Year warranty

The EDT150 range of external AC-DC power adapters are compliant with the latest energy efficiency Level VI standard. The units offer 150 watts of output power in a slim package with output voltages available between 12 and 48VDC. The range is reliable, cost competitive, and comes with an impressive FiDUS 3 year warranty.

Dimensions:

3.06 x 6.61 x 1.78" (77.6 x 168.0 x 45.2mm)

Models & Ratings

SELECT YOUR CONNECTOR PG4

Model Number	Output Power	Output voltage	Output Current	Efficiency
EDT15012-C14	150W	12V	12.5A	88%
EDT15015-C14	150W	15V	10A	88%
EDT15019-C14	150W	19V	7.89A	89%
EDT15024-C14	150W	24V	6.25A	89%
EDT15030-C14	150W	30V	5A	90%
EDT15036-C14	150W	36V	4.16A	90%
EDT15048-C14	150W	48V	3.12A	91%

Notes

1. Alternative output connectors available for production quantities
2. For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately
3. Class II units available. Change –C14 for –C8

Key specifications

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
AC Input range	90		260	VAC	No derating
Operating temperature	-20		70	°C	Derate linearly from 100% load at 40°C to 50% load at 70°C
Efficiency	88		91	%	At full load, rated line. See rating table above
Dimensions	3.06 x 6.61 x 1.78" ±0.04 (77.6 x 168.0 x 45.2mm ±1.0)				
EMC	EN55032 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 Ed2 + A11, UL/CAN 62368-1				

Input

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Input voltage	90		260	VAC	No derating
Input frequency	47		63	Hz	
Power factor	0.95				EN61000-3-2 class A compliant
Input current			2	A	Low line. Full load Vin=100VAC
			0.8		High line. Full load Vin=240VAC
Inrush current			60	A	Low line. Full load 25°C cool start Vin=100VAC
			120		High line. Full load 25°C cool start Vin=240VAC
No load input power			0.21	W	
Earth leakage current			0.75	mA	240VAC 60Hz Class I construction

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Output

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Output voltage	12		48	VDC	
Total regulation	±3		±5	%	Includes set accuracy, line & load regulation. ≤19V: ±5%, 24V ±4% 30-48V: ±3%
Line regulation			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	2		4	%	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	12V model 120mVp-p, 15V model 150mVp-p, 19V model 190mVp-p, 24V model 240mVp-p, 30-48V models 300mVp-p			mVp-p	All models measured with 0.1 and 47uF capacitor. 20 MHz bandwidth
Hold up time	16			ms	
Overload protection					Output protected to short circuit conditions
Over voltage protection	112		132	%	
Short circuit protection					Automatic recovery

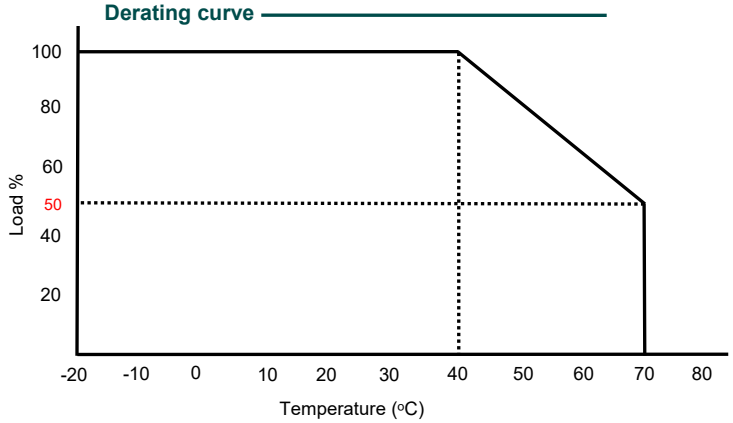
General

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency	88		91	%	See models & Ratings table
Isolation	Input to Output: 4242, Input to Ground: 2121			VDC	
Power density			4.2	W/In^3	
MTBF	100			KHrs	As per MIL-HDBK-217F, 25°C GB
Weight	720		750	g	

Environmental

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating temperature	-20		70	°C	Derate linearly from 100% load at 40°C to 50% load at 70°C
Storage temperature	-40		85	°C	
Cooling					Convection cooled
Altitude			5000	m	
Temperature coefficient			±0.04	%/°C	
Humidity	0		95	% RH	

Derating curve



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			

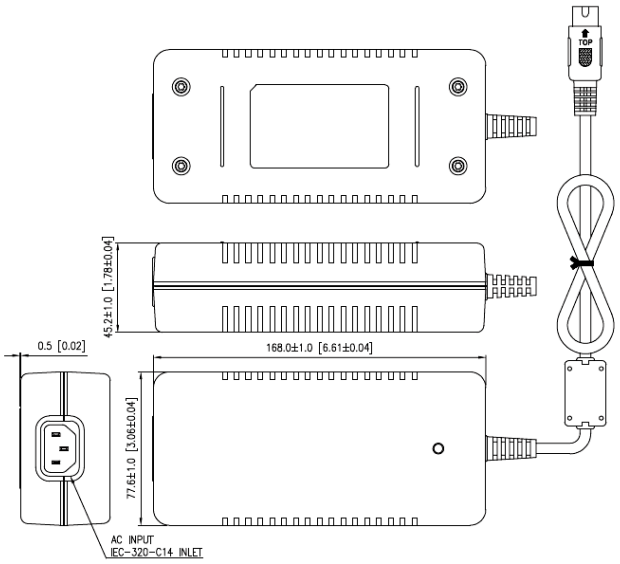
EMC: Immunity

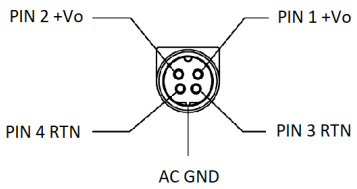
	Standard	Test level	Criteria	Notes & Conditions
ESD	EN61000-4-2	2,3	A	Contact: 4, Air: 8
Radiated	EN61000-4-3	3	A	
EFT	EN61000-4-4	3	A	
Surges	EN61000-4-5	Installation Class 3	A	
Conducted	EN61000-4-6	2	A	
Dips and interruptions	EN61000-4-11	>95% interruption 250 periods, >95% dip 0.5 periods, 30% dip 25 periods. Perf criteria: C,A,A		

Safety Approvals

	Safety standard	Notes & Conditions
UL	UL 60950-1: 2nd edition, UL / CSA 62368-1 Ed2	
CB	IEC 60950-1:2005 /A2:2013, IEC 62368-1 Ed2 +A11	PSE
TUV	EN60950-1:2006 /A2:2013, EN 62368-1 Ed2	
CE		2011/65/EU RoHS Directive and 2014/35/EU Low voltage directive
Equipment protection class		Class I or II (change –C14 to –C8)

Mechanical Details





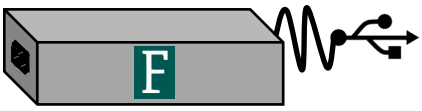
For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately

Notes

1. All dimensions in mm (inches)
2. 12-19V units will use AWG16 4ft, the remainder AWG14 4ft
3. Output connector : Kycon style
4. Negative DC output is floating, For earth bonded negative DC output please contact sales

EDT150 Series

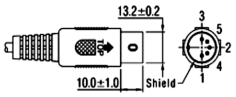
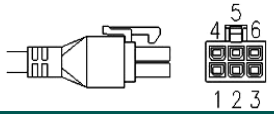
Connector Selector



The EDT150 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

EDT150 SERIES - [CONNECTOR SELECTOR]

	**Friction locking**	DIN-5 plug Friction locking Male			All models	**-P05B**
	**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