100-150W AC-DC External Power Supplies

https://product.tdk.com/en/power/dt-d
https://www.emea.lambda.tdk.com/dt150



Industrial Broadcast Test COMM

Ranging from 100 to 150W, these DT100/150-D external power supplies are certified to UL/CSA/EN/IEC62368-1 and comply with DoE Level VI Efficiency. In addition to satisfying Energy Efficiency Level VI with an average efficiency of greater than 89% and an off-load power draw of less than 150mW, the products also meet EU Tier 2 requirements. All units meet EN55032-B, FCC Class B conducted & radiated emissions and EN55024 immunity standards.

Features	Benefits
• EU CoC Tier 2 & DoE Level VI Compliant	• Meets US and EU Energy Saving Legislation
• Wide Range AC Input (90-264VAC)	• Global Operation
• >89% Average Efficiency	• Consumes Less Energy
• Rugged Non-Vented Enclosure	• Suitable for Harsh Industrial Environment
• Alternative Connectors and Cable Assemblies	• Flexible System Integration

Model Selector

Model	Output Voltage (V)	Maximum Current (A)	Maximum Power (W)	Overvoltage Protection (V)	Output Regulation (%)	Ripple & Noise (mVpk-pk)
DT100PW120D	12	8.34	100	13.2 - 15.6	±5	240
DT100PW160D	16	6.25	100	17.6 - 20.8	±5	320
DT100PW190D	19	5.27	100	20.9 - 24.7	±5	380
DT100PW240D	24	4.17	100	26.4 - 31.2	±3	480
DT100PW360D	36	2.78	100	39.6 - 46.8	±3	480
DT100PW480D	48	2.09	100	52.8 - 62.4	±3	480
DT150PW120D	12	11.67	140	13.2 - 15.6	±5	240
DT150PW160D	16	9.38	150	17.6 - 20.8	±5	320
DT150PW190D	19	7.90	150	20.9 - 24.7	±5	380
DT150PW240D	24	6.25	150	26.4 - 31.2	±3	480
DT150PW360D	36	4.17	150	39.6 - 46.8	±3	480
DT150PW480D	48	3.13	150	52.8 - 62.4	±3	480

DT	100PW	240	D

100PW	
100	100W Output Power
150	140/150W Output Power

240	
120	12V Output Voltage
160	16V Output Voltage
190	19V Output Voltage
240	24V Output Voltage
360	36V Output Voltage
480	48V Output Voltage

Specifications

Model		DT100/150-D
Input		
Input Voltage range	Vac	90 - 264
Input Frequency	Hz	47 - 63
Input Current (90Vac)	A	2.5
Inrush Current at 230Vac (Cold Start)	A	<150 (25°C ambient)
Leakage Current (264Vac 60Hz)	uA	<600
Power Factor	-	Typically 0.9 at full load, 230VAC (Meets EN61000-3-2)
No Load Power Consumption	mW	<150
Hold Up Time (typ) at 115Vac Input	ms	16
Efficiency	%	>89 Avg. Active Efficiency (1)
Conducted & Radiated EMI	-	EN55032-B, FCC Part 15 Class B
Immunity	-	EN55024
Safety Agency Certifications	-	UL/CSA/EN/IEC62368-1, UL/CSA/EN/IEC60950-1, CE Mark (LVD, EMC and RoHS)
Output		
Voltage Accuracy	%	±1
Output Voltage Adjustment	-	None
Switching Frequency (Full Load)	kHz	45 - 55
Total Regulation	-	See Model Selector Table
Ripple & Noise (2)	-	See Model Selector Table
Temperature Coefficient	%/°C	±0.05
Minimum Load	-	No minimum load required
Overcurrent Protection	%	110 - 160 (Auto-Recovery)
Overvoltage Protection	-	See Model Selector Table (Cycle input power to reset)
Short Circuit Protection	-	Continous - Hiccup Mode (Auto Recovery)
Parallel Operation	-	Not possible
Environmental		
Operating Temperature	°C	-20 to +60, de-rate linearly to 50% load from 40 to 60
Storage Temperature	°C	-20 to +85
Humidity (non condensing)	%RH	20 - 90
Cooling	-	Convection
Altitude	m	2,000
Withstand Voltage (For 1 minute)	Vac	Input to Ground 1,500, Input to Output 3,000, Output to Ground 500VDC (3)
IP Rating	-	IPX0
Vibration (non-operating)	m/s^2	23.52 (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)
Shock	m/s^2	<196.1 (20G)
Other		
Weight (Typ)	g	780
Size (LxWxH)	mm	170 x 85 x 44
Size (LxWxH)	Inches	6.70 x 3.35 x 1.73
AC Input Connector	-	IEC 320-C14 (Accepts IEC 320-C13)
DC Output Connector	-	Kycon KPPx-4P or equivalent Pins 1 & 2: -Vout, Pins 3 & 4: +Vout
Cable Length & Thickness	-	1050mm; 12 to 16V Models: UL2464 #16 AWG, 19 to 48V Models: UL2464 #18 AWG
MTBF (MIL-HNBK, 100% load, 25°C)	hrs	140,000
Warranty	yrs	3

Notes

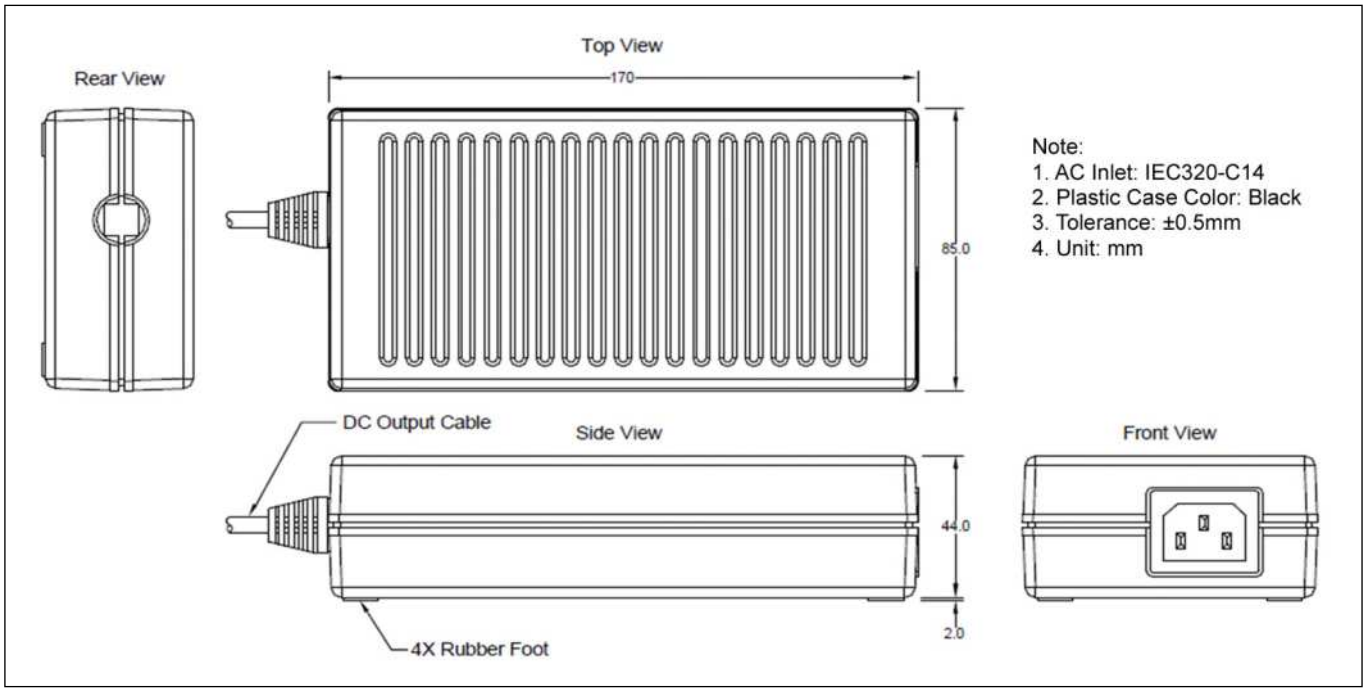
See website for detailed specifications, test methods and installation manual

(1) Measured at 25%, 50%, 75% and 100% load conditions

(2) Ripple and noise is measured at 20MHz BW. Add 0.1uF ceramic capacitor and 10uF Electrolytic capacitor in parallel across the output

(3) Versions available for output to be internally connected to ground. Contact local sales office.

Outline Drawing



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