

TDK-Lambda

DTM110 Series Datasheets



DTM110-C Series

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DTM110-C8 Series

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90-110W Medical AC-DC External Power Supplies

Features

- ◆ CEC, EISA⁽¹⁾ & ErP Stage 2 Compliant
- ◆ Wide Range AC Input
- ◆ Medical Certifications
- ◆ > 87% Average Efficiency



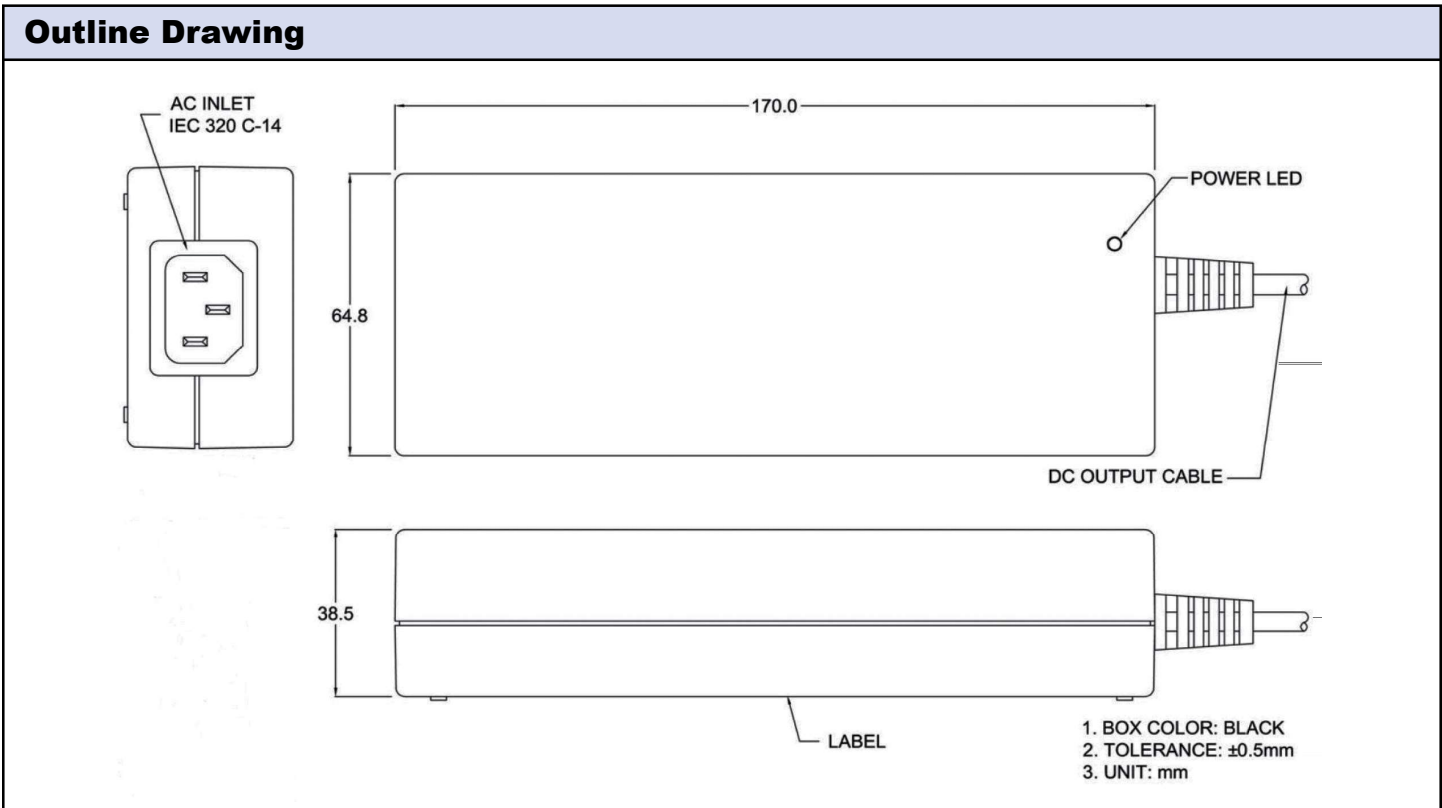
Key Market Segments & Applications



Specifications		
Model	DTM110PWxxx-C	
Input Voltage range	VAC	90 - 264VAC (47 - 63Hz)
Inrush Current	A	<100A at 230VAC input, 25°C ambient cold start
Input Current	A	2A at 90VAC, Full Load
Power Factor	-	Meets EN61000-3-2. >0.9 PF
Leakage Current (264VAC 60Hz)	µA	<300µA
Hold Up Time (Typ)	ms	>10ms
Temperature Coefficient	%/°C	±0.05%/°C
Voltage Accuracy	%	±1%
Adjustment Range	V	None
Minimum Load	A	None
Total Regulation	%	12V to 15V Models:±5%, >15V models ±3%
Ripple & Noise	%	1%
Short Circuit Protection	-	<160% - hiccup mode
Overvoltage Protection	V	110 - 150% of nominal (Cycle input power to reset)
Efficiency	%	>87% average efficiency
Operating Temperature	°C	0 to +40°C
Storage Temperature	°C	-10 to +70°C
Humidity (non condensing)	%RH	10 - 90%RH
Cooling	-	Convection
Withstand Voltage	VAC	Input to Ground 1.5kVAC, Input to Output 4kVAC (Reinforced) (2 x MOPPS 3rd Edition) (Output is isolated from Ground)
Vibration (non operating)	-	23.52m/s ² (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)
Shock	-	< 196.1 m/s ² (20G)
Safety Agency Approvals	-	UL/CSA/IEC/EN 60601-1, ANSI/AAMI ES60601-1, CE Mark
California Energy Commission (CEC)	-	See model selector
EISA	-	See model selector
Offload Power Consumption	W	< 0.5W
Conducted & Radiated EMI	-	EN55022, EN60601-1-2, FCC Part 18 Class B
Immunity	-	EN55024
Weight (Typ)	g	605g
Size (LxWxH)	mm	170 x 64.7 x 38.4mm
Size (LxWxH)	in	6.7 x 2.55 x 1.51"
Cable Length	mm	1050mm
AC Input Connector	-	IEC 320-C14 (Accepts IEC 320-C13)
Output Connector	-	Kycon KPPx-4P or equivalent Pins 1 & 2: -Vout, Pins 3 & 4: +Vout
Warranty	yrs	Three Years

(1) EISA - Energy Independence and Security Act of 2007

Output Ratings					
Model	Output (V)	Maximum Output (A)	Maximum Power (W)	CEC	EISA Efficiency Level
DTM110PW120C	12	7.5	90	V	V
DTM110PW135C	13.5	6.67	90	V	V
DTM110PW150C	15	6.67	100	V	V
DTM110PW190C	19	5.8	110	V	V
DTM110PW200C	20	5.5	110	V	V
DTM110PW240C	24	4.6	110	V	V



Other AC-DC Products	
DT62-C	62W CEC Compliant Adapters
DTM65-C	40W to 65W Medical Adapters
DT80-C	80W CEC Compliant Adapters
DT100 / 150-C	100W & 150W CEC Compliant Adapters

For Additional Information, please visit
<https://product.tdk.com/en/power/>



110W Medical/ITE Class II External Power Supplies

Features

- ◆ Meets DoE Level VI & EU Tier 2 Efficiency
- ◆ Medical & ITE Certifications
- ◆ Class II Input (No Earth Ground Required)
- ◆ < 0.15W Off-load Power Draw
- ◆ Meets IEC60601-1-2 Ed4 & 60601-1-11
- ◆ Suitable for B & BF Rated Equipment



Key Market Segments & Applications



Specifications		
	Model	DTM110-C8
Input Voltage range	VAC	90 - 264VAC (47 - 63Hz)
Inrush Current	A	<120A at 230VAC input, 25°C ambient cold start
Input Current	A	2A @90VAC; 1.25A @264VAC Maximum
Touch Current	-	<100uA @ 264VAC
Power Factor	-	Meets EN61000-3-2, >0.9 at 230VAC full load
Hold Up Time (Typ)	ms	10ms at 115VAC input
Temperature Coefficient	%/°C	±0.05%/°C
Adjustment Range	-	None
Minimum Load	A	None
Total Regulation	%	12-19V: ±5%, 24-48V: ±3%
Ripple & Noise (pk-pk)	mV	150mV
Overload & Short Circuit Protection	-	105 - 150% - hiccup mode
Overvoltage Protection	V	Cycle input power to reset
Efficiency	%	>89%, average efficiency
Operating Temperature	°C	-20 to +60°C derate linearly to 50% load from 40 to 60°C Derate linearly to 80% load from 0 to -20°C
Storage Temperature	°C	-20 to +85°C
Humidity (non condensing)	%RH	0 - 95%RH
Cooling	-	Convection
Withstand Voltage	VAC	Input to Output 4kVAC (2xMoPP)
Safety Agency Certification	-	IEC/ES/CSA/EN60601-1, IEC60601-1-11, IEC/UL/CSA/EN60950-1, CE Mark
Offload Power Consumption	W	< 0.15W
EMC	-	IEC60601-1-2 Ed4:2014, EN55011 Class B, EN55032 Class B, FCC Part 15 Class B, FCC Part 18 Class B
IP Rating	-	IP41
Altitude	m	5,000m maximum
Weight (Typ)	g	780g
Size (LxWxH)	mm	140 x 63 x 33mm
Size (LxWxH)	in	5.5 x 2.48 x 1.29"
Cable Length	mm	1000mm
AC Input Connector	-	IEC 320-C8 (2 prong)
Output Connector	-	Kycon KPPX-4P or equivalent; Pins 1 & 2: -Vout, Pins 3 & 4: +Vout
Warranty	yrs	Three Years

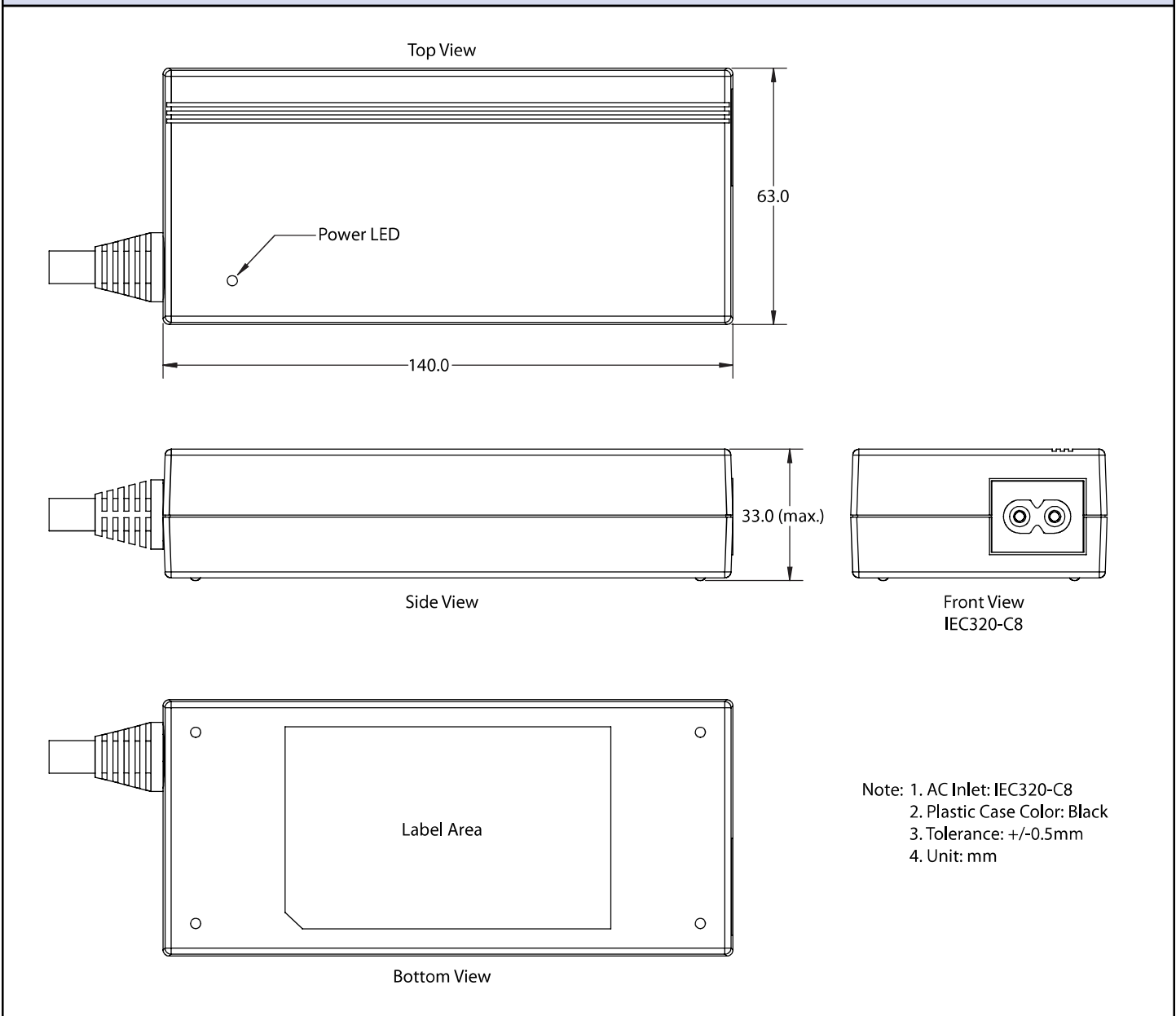
Notes:

Other connectors are available. Contact factory.

Model Selector

Model	Output (V)	Maximum Output (A)	Maximum Power (W)
DTM110PW120C8	12V	8.75A	105W
DTM110PW150C8	15V	7.34A	110W
DTM110PW190C8	19V	5.79A	110W
DTM110PW240C8	24V	4.59A	110W
DTM110PW280C8	28V	3.93A	110W
DTM110PW360C8	36V	3.06A	110W
DTM110PW480C8	48V	2.29A	110W

Outline Drawing



For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

