

TDK-Lambda

DTM65 Series Datasheets



DTM65-C8 Series

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DTM65-D Series

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40W to 65W Medical Class II AC-DC External Power Supplies

Features

- ◆ Meets DOE Level VI Efficiency
- ◆ 60601-1 & 60601-1-11 Medical Certifications
- ◆ Class II Input
- ◆ < 0.21W Off-load Power Draw



Key Market Segments & Applications



Medical



RoHS

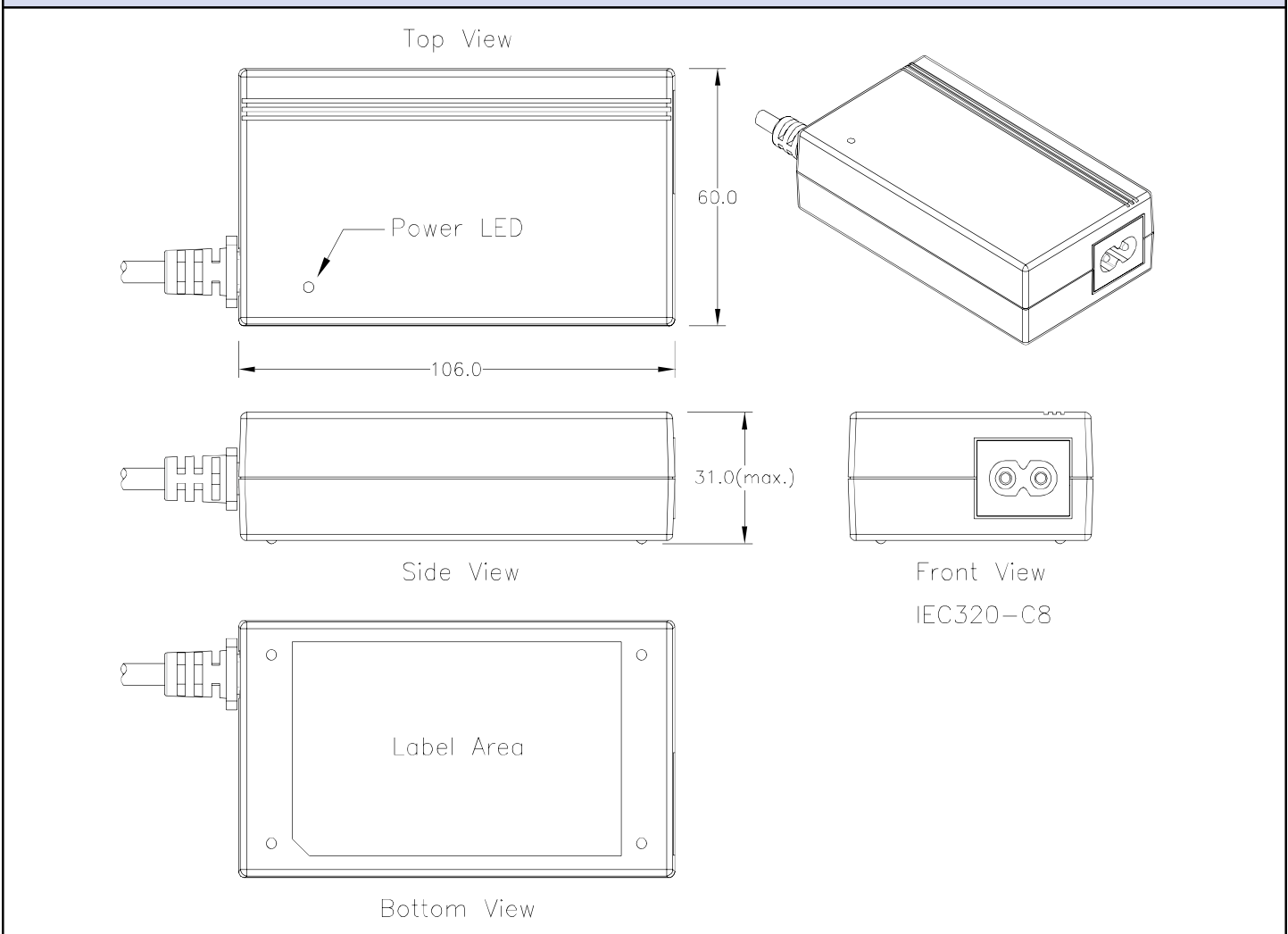
Specifications

Model		
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 Class A
Hold Up Time (Typ)	ms	10ms at 115VAC input
Temperature Coefficient	-	±0.05%/°C
Voltage Accuracy	%	±1%
Adjustment Range	-	None
Minimum Load	A	None
Total Regulation	-	5V to 15V Models:±5%, >15V models ±3%
Ripple & Noise	%	1% pk-pk
Overload & Short Circuit Protection	-	Continuous - hiccup mode
Overvoltage Protection	V	110 - 150% of nominal (Cycle input power to reset)
Overtemperature Protection	-	Yes (Cycle input power to reset)
Efficiency	%	>88%, average efficiency (5V model: >83.8%)
Operating Temperature	-	0 to +60°C derate linearly to 50% load from 41 to 60°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
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 Certifications	-	ANSI/AAMI ES60601-1, EN/IEC60601-1, CSA-C22.2 No.60601 3rd edition (2 x MOPP)
Offload Power Consumption	W	< 0.21W
EMC	-	EN55011B, EN60601-1-2
IP Rating	-	IP22
Weight (Typ)	g	240g
Size (WxLxH)	in (mm)	2.36 x 4.17 x 1.22" (60 x 106 x 31mm)
Cable Length	mm	1050mm
AC Input Connector	-	IEC 320-C8 (2 prong)
Output Connector	-	Kycon KPPX-4P or equivalent Pins 1 & 2: -Vout, Pins 3 & 4: +Vout
Warranty	Years	Three Years

Output Ratings

Model	Output (V)	Maximum Output (A)	Maximum Power (W)	Efficiency Level
DTM65PW050C8	5	8	40	V
DTM65PW120C8	12	5	60	VI
DTM65PW150C8	15	4	60	VI
DTM65PW190C8	19	3.42	65	VI
DTM65PW240C8	24	2.7	65	VI
DTM65PW280C8	28	2.32	65	VI
DTM65PW480C8	48	1.35	65	VI

Outline Drawing



Other AC-DC Products

DT62-C	62W CEC Compliant Adapters
DT80-C	80W CEC Compliant Adapters
DT100 / 150-C	100W & 150W CEC Compliant Adapters
DTM110-C	110W CEC Compliant Medical Adapters

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



40-65W Medical AC-DC External Power Supplies

Features

- ◆ Meets DoE Level VI & EU ErP Tier 2 v5 Efficiency
- ◆ Medical Certifications
- ◆ Class I Input
- ◆ < 0.15W Off-load Power Draw
- ◆ <100µA Touch Current



Key Market Segments & Applications



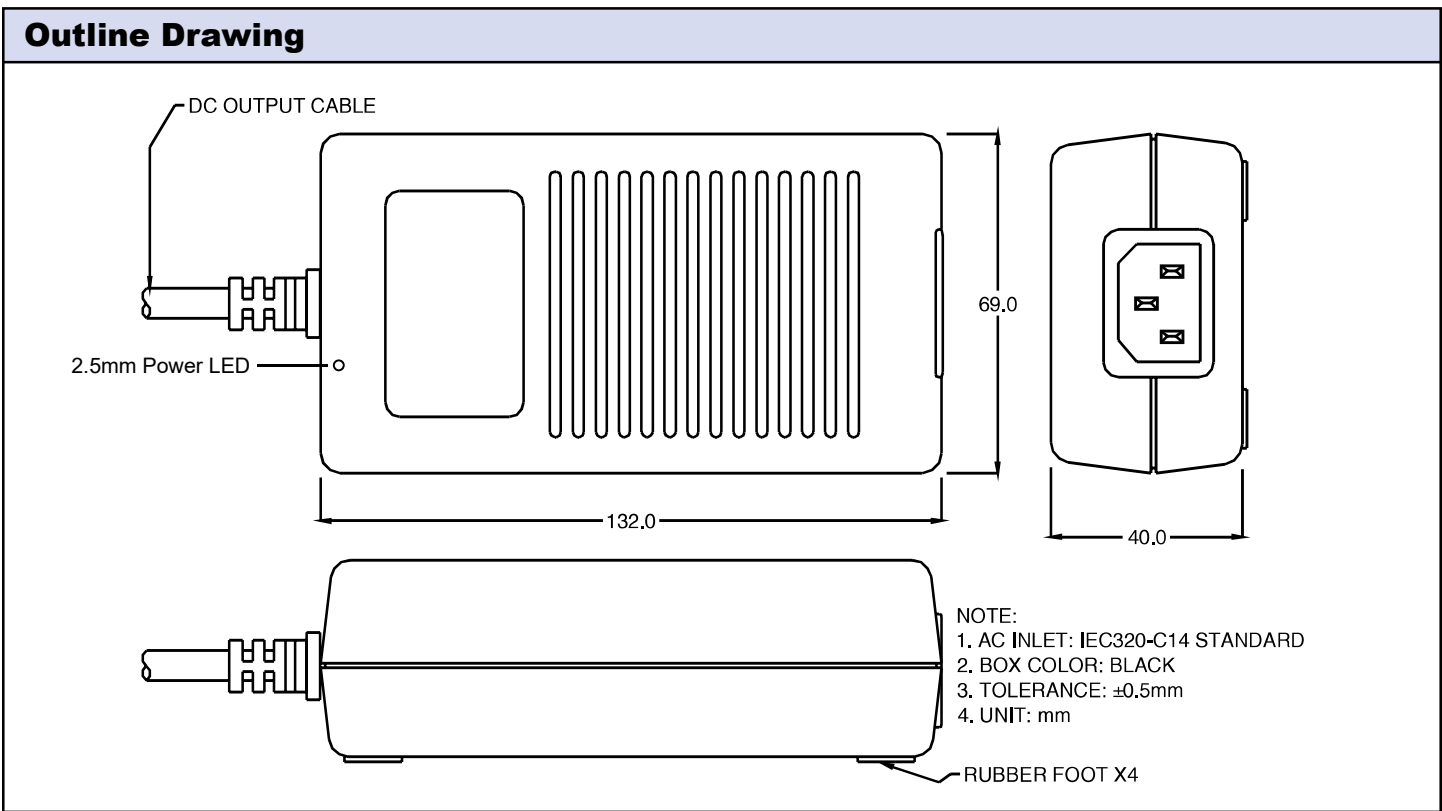
Medical



RoHS

Specifications		
Model		
Input Voltage range	-	90 - 264VAC (47 - 63Hz)
Inrush Current	A	<50A at 115VAC, <90A at 230VAC input, 25°C ambient cold start
Input Current	A	2A at 90VAC, Full Load
Offload Power Consumption	W	< 0.15W
Touch Current	µA	<100µA
Leakage Current	µA	<300µA
Power Factor	-	None
Hold Up Time	ms	>10ms at 115VAC input
Temperature Coefficient	-	±0.05%/°C
Voltage Accuracy	%	Included in total regulation specification
Adjustment Range	-	None
Minimum Load	A	None
Total Regulation	%	5V to 15V Models:±5%, >15V models ±3%
Ripple & Noise	mV	1% pk-pk or 120mV whichever is greater
Overload & Short Circuit Protection	-	Continuous - hiccup mode
Overvoltage Protection	%	110 - 170% of nominal (Cycle input power to reset)
Overtemperature Protection	-	Yes (Cycle input power to reset)
Efficiency	%	>89%, average efficiency (5V model: 87.3%)
Operating Temperature	°C	-20 to +60°C derate linearly to 75% load from 51 to 60°C
Storage Temperature	°C	-20 to +85°C
Humidity (non condensing)	%RH	10 - 90% RH
Cooling	-	Convection
Withstand Voltage	VAC	Input to Ground 1.5kVAC, Input to Output 4kVAC (2xMOPPs), (Output is connected to 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 Certifications	-	UL/CSA/IEC/EN 60601-1, ANSI/AAMI ES60601-1, CE Mark
Altitude	m	5,000m
Offload Power Consumption	W	< 0.15W
EMC	-	EN55011B, EN60601-1-2, FCC Part 18 Class B
Immunity	-	IEC60601-1-2 Ed4:2014/2015
Weight (Typ)	g	390g
Size (WxLxH)	in (mm)	2.72 x 5.2 x 1.57" (69 x 132 x 40mm)
Cable Length	mm	1050mm (5V model: 600mm)
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

Output Ratings					
Model	Output (V)	Maximum Output (A)	Maximum Power (W)	Efficiency Level	EU ErP
DTM65PW050D	5	8	40	VI	Tier 2
DTM65PW120D	12	5	60	VI	Tier 2
DTM65PW150D	15	4	60	VI	Tier 2
DTM65PW190D	19	3.42	65	VI	Tier 2
DTM65PW240D	24	2.71	65	VI	Tier 2
DTM65PW280D	28	2.32	65	VI	Tier 2
DTM65PW360D	36	1.81	65	VI	Tier 2
DTM65PW480D	48	1.35	65	VI	Tier 2



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<https://product.tdk.com/info/en/products/power/index.html>

