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

https://product.tdk.com/en/power/dtm
www.emea.lambda.tdk.com/dtm



Medical Home Medical

The DTM65-C8 Class II 40 to 65W external power supplies are certified to IEC/ES/EN60601-1, EN60601-1-11 and are compliant to EN60601-1-2 (Ed4). All models also meet EN55011-B, FCC Class B conducted & radiated emissions. Requiring no earth ground, the DTM65-C8 series is ideally suited for a variety of Medical, Clinical and Home Healthcare applications, including diagnostic and monitoring equipment.

Features	Benefits
• Medical Safety Certifications and Immunity	• Suitable for Medical, Clinical and Home Healthcare Use
• Meets DoE Level VI (Level V for 5V model)	• Meets US Energy Saving Legislation
• >88% Average Efficiency, <0.21W No Load Power	• Consumes Less Energy
• 4kV (2xMOPP) Input to Output Isolation	• Suitable for B and BF Rated Equipment
• Wide Range AC, Class II Input IEC320-C8	• Global Operation, No Earth Required

Model Selector

Model	Output Voltage (V)	Max Current (A)	Max Power (W)	Overvoltage Protection (V)	Output Regulation (%)	Ripple & Noise (mVpk-pk)	DoE Efficiency Level
DTM65PW050C8	5	8	40	5.5 - 7.5	±5	50	V
DTM65PW120C8	12	5	60	13.2 - 18.0	±5	120	VI
DTM65PW150C8	15	4	60	16.5 - 22.5	±5	150	VI
DTM65PW190C8	19	3.42	65	20.9 - 28.5	±3	190	VI
DTM65PW240C8	24	2.7	65	26.4 - 36.0	±3	240	VI
DTM65PW280C8	28	2.32	65	30.8 - 42.0	±3	280	VI
DTM65PW480C8	48	1.35	65	52.8 - 72.0	±3	480	VI

DTM65PW	190	C8

050	5V Output Voltage
120	12V Output Voltage
150	15V Output Voltage
190	19V Output Voltage
240	24V Output Voltage
280	28V Output Voltage
480	48V Output Voltage

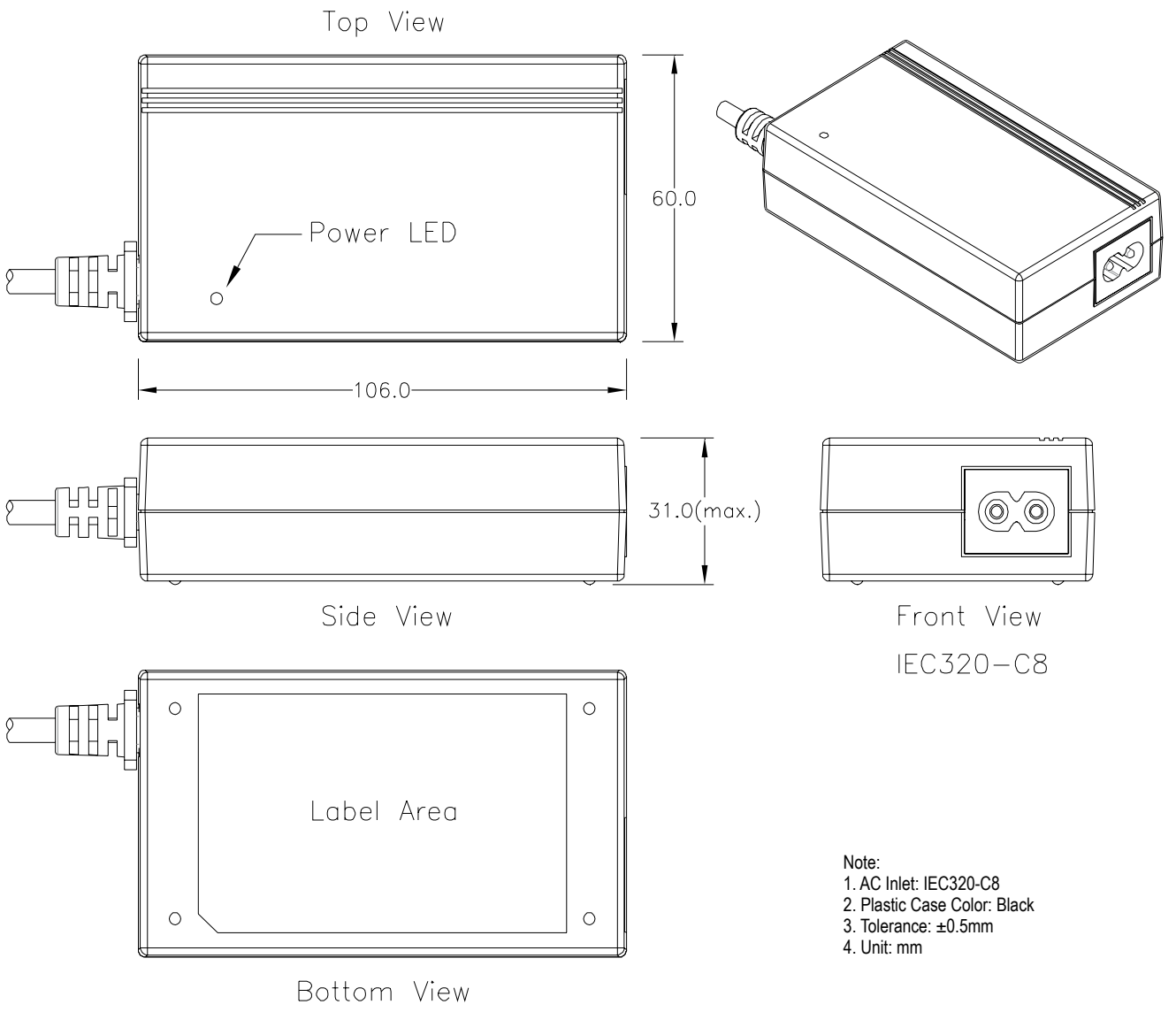
IEC C8 input connector

Specification

Model		DTM65-C8
Input		
Input Voltage range	Vac	90 - 264
Input Frequency	Hz	47 - 63
Input Current (90Vac)	A	2
Inrush Current at 230Vac (Cold Start)	A	<100 (25°C ambient)
Leakage Current	uA	<100
No Load Power Consumption	mW	<210
Hold Up Time (typ) at 115Vac Input	ms	10
Average Efficiency (1)	%	>88 (5V model: >83.8)
Conducted & Radiated EMI	-	EN55011-B
Immunity	-	EN60601-1-2
Insulation Class	-	Class II
Safety Agency Certifications	-	UL/EN/IEC60601-1, ANSI/AAMI ES60601-1, CSA-C22.2 No.60601, CE Mark (LVD, EMC and RoHS)
Output		
Voltage Accuracy	%	±1
Output Voltage Adjustment	-	None
Switching Frequency (Full Load)	kHz	45 - 65
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	%	160 (Auto-Recovery)
Overvoltage Protection	-	See Model Selector Table (Cycle input power to reset)
Short Circuit Protection	-	Continous - Hiccup Mode (Auto-Recovery)
Indicators	-	LED indicates DC output is on
Parallel Operation	-	Not possible
Environmental		
Operating Temperature	°C	0 to 60 derate linearly to 50% load from 40 to 60
Storage Temperature	°C	-10 to 70
Humidity (non condensing)	%RH	10 - 90
Cooling	-	Convection
Altitude	m	3,000
Withstand Voltage (For 1 minute)	Vac	Input to Output 4,000 (2xMOPP)
Isolation Resistance	MΩ	20
IP Rating	-	IP22
Vibration (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	240
Size (LxWxH)	mm	106 x 60 x 31
Size (LxWxH)	Inches	4.17 x 2.36 x 1.22
AC Input Connector	-	IEC 320-C8 (2 prong)
DC Output Connector	-	Kycon KPPx-4P or equivalent Pins 1 & 2: -Vout, Pins 3 & 4: +Vout
Cable Length & Thickness		1000mm; UL1571 #14 AWG
MTBF (MIL-HDBK), 100% load, 25°C	hrs	100,000
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

Outline Drawing



Note:
1. AC Inlet: IEC320-C8
2. Plastic Case Color: Black
3. Tolerance: ±0.5mm
4. Unit: mm



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