

150-160W Medical and ICT Class I and II External AC-DC Power Supplies

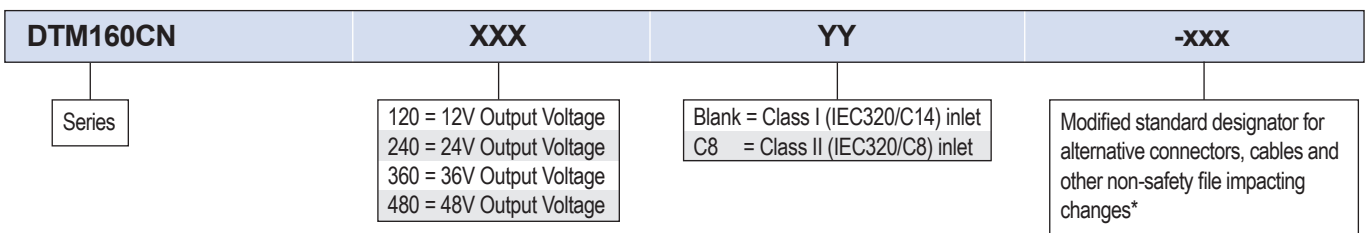
<https://product.tdk.com/en/power/dtm>
www.emea.lambda.tdk.com/dtm



The DTM160 Class I and DTM160-C8 Class II (no ground connection) 150-160W external power supplies are certified to IEC/UL/CSA/EN60601-1, IEC60601-1-11 (DTM160-C8 model) and are compliant to IEC60601-1-2 (Ed4) and IEC/BS/EN62368-1. With an average efficiency of up to 93% and an off-load power consumption of less than 0.15W, this series also complies with DoE Level VI standards. The DTM160 series is suitable for a variety of medical, clinical, healthcare, industrial, test and measurement applications.

Features	Benefits
• Wide Range AC Input (Class I or Class II Input Options)	• Supports Medical and Industrial Applications Globally
• Locking Output Connector	• Avoids Accidental Disconnection
• DoE Level VI Efficiency	• Meets US Energy Saving Legislation
• 60601-1 Medical Certifications (2xMOPP)	• Suitable for B & BF Rated Equipment
• 62368-1 Compliant for ICT and Industrial Applications	• Suitable for Industrial Applications
• < 0.15W Off-load Power Draw	• Consumes Less Energy, ErP Compliant

Model Selector							
Model	Output Voltage (V)	Maximum Current (A)	Maximum Power (W)	Overvoltage Protection (V)	Ripple & Noise (mV pk-pk)	Efficiency at 230Vac (%)	Max. Load Capacitance (µF)
DTM160CN120	12	12.5	150	13.2	120	91	12,250
DTM160CN240	24	6.66	160	28.6	200	92	6,600
DTM160CN360	36	4.44	160	41.8	200	92	4,330
DTM160CN480	48	3.33	160	55.6	200	93	3,240
DTM160CN120C8	12	12.5	150	13.2	120	91	12,250
DTM160CN240C8	24	6.66	160	28.6	200	92	6,600
DTM160CN360C8	36	4.44	160	41.8	200	92	4,330
DTM160CN480C8	48	3.33	160	55.6	200	93	3,240



* Contact Sales, MOQs may apply

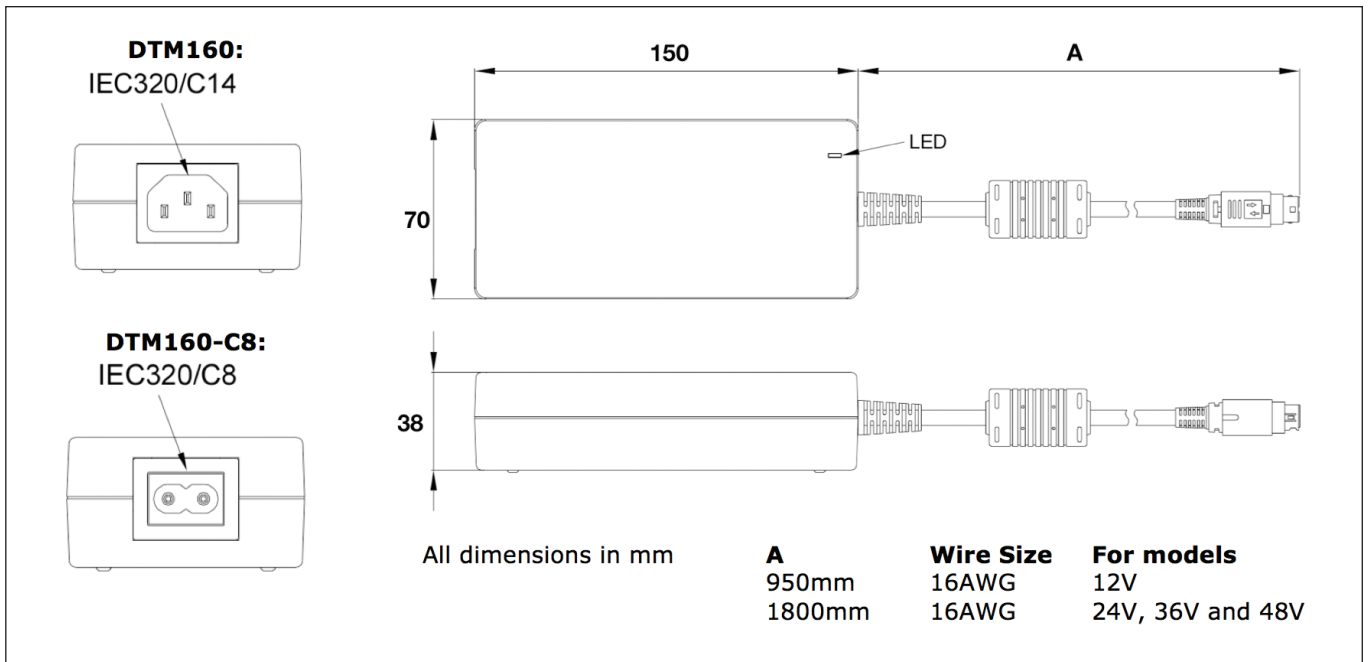
Related Products		
Type	Part Number	Description
Power supply	DTM and WMM	30 to 300W external power supplies

Specifications		
Model		
Input		
AC Input Voltage Range (Operating)	Vac	80 - 264 - Derate output power linearly to 80% load from 80Vac to 90Vac input
Nominal Input Voltage Range	Vac	100 - 240 (Note: Safety certified for 90-264Vac only)
Input Frequency	Hz	47 - 63
Input Current (100/230Vac)	A	2.0 / 0.95
Power Factor (100/230Vac)	-	0.9 / 0.9
Harmonic Compliance	-	Meets EN61000-3-2 Class A
Inrush Current at 240Vac (Cold Start)	A	<120 (25°C ambient)
Earth Leakage Current	uA	<300 (DTM160)
Touch Current	uA	<90 (DTM160, DTM160-C8)
No Load Power Consumption	mW	<150
Hold Up Time (typ. at 115/230Vac)	ms	25 / 25
Line Regulation	%	1
Efficiency	%	See Model Selector Table
Low Input Voltage Protection	Vac	60 - 70
Conducted & Radiated EMI	-	IEC/EN61000-6-1, IEC/EN61000-6-2, EN55011 (Class B), EN55032 (Class B), FCC 47 Part 18, IEC60601-1-2; IEC/EN 61000-3-2, IEC/EN 61000-3-3
Immunity	-	IEC/EN61000-6-3, IEC/EN61000-6-4, IEC60601-1-2
Insulation Class	-	DTM160: Class I, DTM160-C8: Class II
Safety Certifications and Markings	-	IEC/UL/CSA/EN60601-1, IEC/BS/EN62368-1 (compliant to), IEC60601-1-11 (Class II models), CE Mark and UKCA Mark
Output		
Voltage Accuracy	%	± 2 (at 115/230Vac, 60% load and 25°C ambient)
Output Voltage Adjustment	-	None
Switching Frequency (Full Load)	kHz	115
Ripple & Noise (2)	-	See Model Selector Table
Minimum Load	-	No minimum load required
Overcurrent Protection	%	110 - 130 (Auto-Recovery)
Overvoltage Protection	-	See Model Selector Table (Latching-type)
Short Circuit Protection	-	Continuous - Hiccup Mode (Auto-Recovery)
Indicators	-	LED indicates DC output is on
Parallel Operation	-	Not possible
Environmental		
Operating Temperature	°C	-20 to +70, derate linearly to 50% load from +40 to +70
Storage Temperature	°C	-40 to +85
Humidity (non condensing)	%RH	93 (max.)
Overvoltage Category	-	II
Pollution Degree	-	2
Cooling	-	Convection
Altitude	m	5,000
Withstand Voltage (For 1 minute)	Vac	DTM160: Input to Output 4,400 (2x MOPP), Input and Output to Ground 1,700 (1x MOPP) DTM160-C8: Input to Output 4,400 (2x MOPP)
Isolation Resistance	MΩ	20
IP Rating	-	IP22
Other		
Weight (Typ)	g	575
Size (LxWxH)	mm	150 x 70 x 38
Size (LxWxH)	Inches	5.91 x 2.76 x 1.50
MTBF (MIL HDBK 217F at full load, GB25°C)	Hours	370,000
Warranty	Years	3

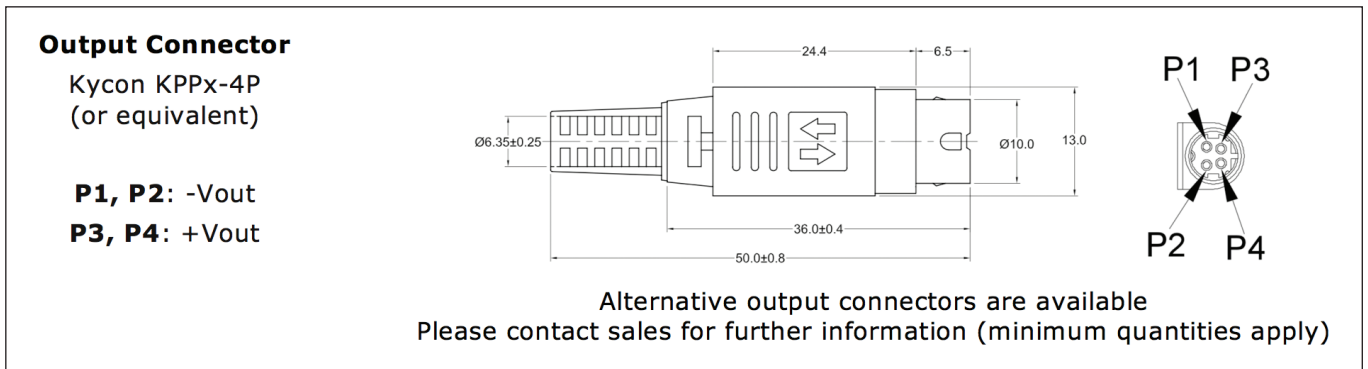
Notes

(1) Ripple and noise is measured at 20MHz bandwidth. Add 100nF ceramic capacitor and 10uF electrolytic capacitor in parallel across the output

Mechanical Specification



Output Connector





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