

DT040AF | ITE & Medical Safety

40W/60W Peak

- Level VI energy compliant
- No load input power < 0.075W
- Average efficiency > 88.7%
- Eco-friendly design
- UL/CSA/EN 60950-1 and UL/CSA/EN 60601-1 3rd Edition
- 10 year warranty



Q4 2014

GREEN POWER

Description

The **DT040AF Series** is a 40W external power supply (EPS) designed for both medical and ITE applications. The eco-friendly design is compliant with the new DOE Energy Conservation Standards for External Power Supplies. With a 150% (60W) peak power rating, operating efficiencies > 87.7% and no-load input power < 0.075W, the DT040AF Series is ideal for ITE and medical equipment designs, including MOOP and 2X MOPP, that are compliant with 2016 conservation standards.

Specifications

Input voltage	• 90 VAC to 264 VAC
Input frequency	• 47Hz to 63Hz
Inrush current	• < 80A at 230VAC
Hold up time	• 16ms typical
Overload/Short circuit protection	• auto recovery
Over voltage protection	• latch off
Operating temperature	• -20°C to 60°C derating: 2.5%/°C > 40°C
Storage temperature	• -20°C to +85°C

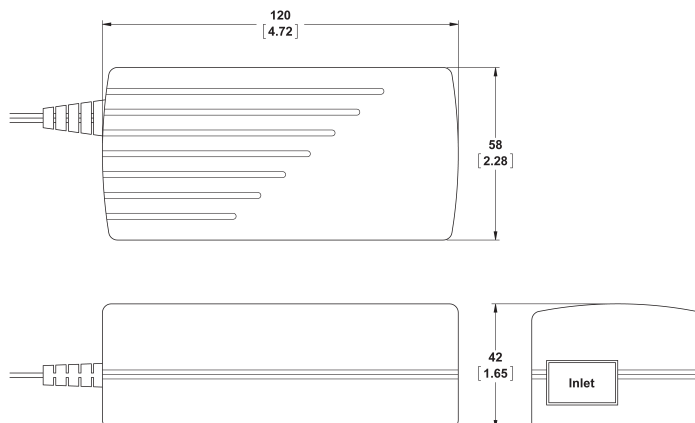
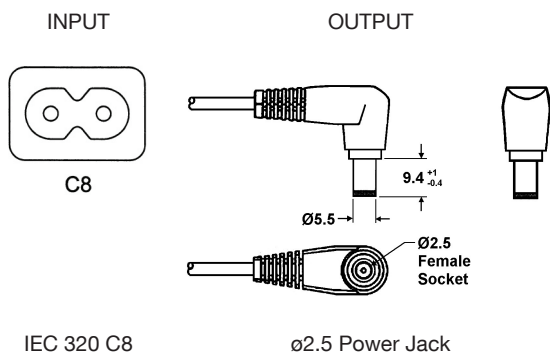
EMI	• FCC class "B" CISPR 22 level "B"
Harmonics	• EN61000-3-2, class A
EMS	• EN61000-4-2,-3,-4 , -5,-6,-8,-11
Safety	• UL6060 1-1, UL60950-1 CSA C22.2 No. 60950-I(cUL) TUV EN6060 1-1 , EN60950-1
Energy Saving	• EC Code of Conduct for EPS Version (Tier 2)

Mechanical Specifications

Notes

1. Dimensions shown in mm. Tolerance: ±1 mm (excluding cable).
2. Size: 58 X 120 X 42 (mm)
2.29" X 4.73" X 1.66"
Net weight: 300 g approx./unit

3. Connectors:



4. Box Color: Black
5. RoHS Compliant

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Output Specifications

Model No.	Output Rail	Load				Initial Accuracy	Step Efficiency			Avg. Eff.
		Min	Rated	Max	Peak		@20% Load	@50% Load	@100% Load	
DT040AF-5	+12V	0A	3.7A	-	5.6A	+11.9V~+12.1V	88%	88%	88%	88%
DT040AF-8	+15V	0A	3A	-	4.5A	+14.9V~+15.1V	88%	88%	88%	88%
DT040AF-6	+24V	0A	1.9A	-	2.85A	+23.8V~+24.2V	88%	88%	88%	88%
DT040AF-14	+48V	0A	1A	-	1.5A	+47.6V~+48.4V	88%	88%	88%	88%

Notes

- Output Load:**
Rated 40W for convection cooling.
- Peak Load Duration:**
60W peak rating for durations up to 5 sec. Ideal for motor-starting/in-rush conditions.
- Engineering Specification:**
Contact Tri-Mag for full engineering specification for the specific part number used in your design application.
- Standby Power Consumption with System:**
This is required by ENERGY STAR in U.S. and ErP regulation in Europe for appliances such as computers and displays. The latest requirement is measured input power to be less than 0.5W with system.
- Audible Noise:**
For the DT040AF-x energy saving series, achieving level VI (<0.3W) standby power consumption is accomplished through burst mode operation of the controller. The burst operation frequency is dependent on load conditions and is approx. 114Hz, within the audible frequency range.
- Step Efficiency and Average Efficiency:**
Test conditions in step efficiency are referred to 3.2.2 IPS (Internal Power Supply) of ENERGY STAR program requirements for computers. ENERGY STAR required for efficiency @ 20%,50%, 100% load is 82%.85%, 82%; average efficiency is the average of step efficiency.
- Model Ordering Table:**

Safety/Application	Energy Saving
ITE & Medical	DT040AF-x