

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

ADT-150A



Highlights & Features

- Meet efficiency DoE Level VI & CoC Tier 2
- No load power consumption < 0.15 W
- Universal AC input / Full range
- Fully enclosed plastic case
- Protection: short circuit / over voltage / overload/ over temperature

Safety Standards



CB Certified for worldwide use

Model Number: ADT-150A24AA H-A
Unit Weight: 405 ±10 grams (14.29 ±0.35 ounces)
Dimensions (L×W×H): 160 x 76.2 x 25.8 mm

General Description

The ADT Series of AC-DC desktop adapter in compact size. ADT-150A24AA H-A meet the DoE Level VI and CoC Tier 2 energy efficiency requirements with levels up to 92% and the extremely low no-load power consumption below 0.15 W. The series conform to major international safety standards according to IEC/EN/UL 62368-1 and IEC/EN 60950-1 approval for ITE. In addition, they also meet the EMI approvals to EN\BS EN 55032 class B.

Model Information

Model Number	Input Voltage Range	Efficiency Level	Rated Output Voltage	Rated Output Current
ADT-150A24AA H-A	90-264 Vac	Level VI & CoC Tier2	24 V	6.25 A

Model Numbering

ADT -	150	A	24	A	A	H -	A
Desktop Adapter for ITE application	Max wattage	Family Code	Output Voltage 24 for 24 V	A : Desktop	Input Connector A : C6	Output Connector H : Tuning fork O.D: 5.5 mm, I.D: 2.5 mm, length: 11.0 mm	Standard

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Specifications

Input Ratings / Characteristics

Nominal Input Voltage	100-240 Vac	
Input Voltage Range	90-264 Vac	
Nominal Input Frequency	50-60 Hz	
Input Frequency Range	47-63 Hz	
Input Current (max)	115 Vac	1.85 A
	230 Vac	1.0 A
Efficiency at 100% Load	115 Vac	91.0% typ.
	230 Vac	92.0% typ.
Average Efficiency (min)	89% @ 115 Vac & 230 Vac	
Efficiency @ 10% load	79% @ 115 Vac & 230 Vac	
No Load Power Consumption (max)	0.15 W @ 115 Vac & 230 Vac	
Power Factor @ 100% load (min)	0.9 @ 230 Vac	
Inrush Current	No damage	
Leakage Current @ 240 Vac/50 Hz (max)	250 uA	

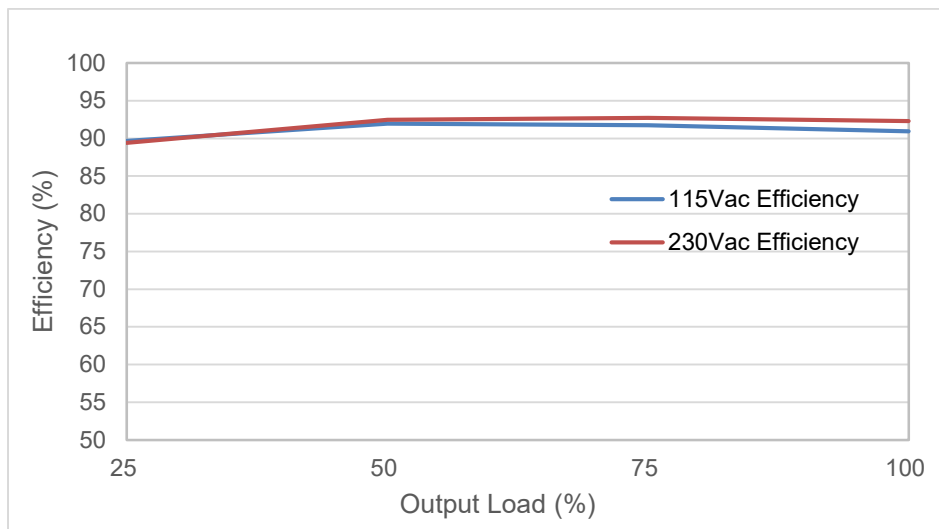


Fig 1. ADT-150A24AA H-A Efficiency versus Output Load

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Output Ratings / Characteristics

Nominal Output Voltage	24 V	
Output Current	6.25 A	
Output Power	150 W	
Line Regulation	± 0.5%	
Load Regulation	± 3.0%	
PARD* (20 MHz)	0 to 40°C	240 mV pk-pk
	-10 to 0°C	480 mV pk-pk
Start-up Time	1000 ms typ. @ 115 Vac 500 ms typ. @ 230 Vac	
Rise Time (max)	40 ms @ nominal input, full load	
Hold-up Time (typ.)	30 ms @ 115 Vac, full load	
Transient Responses	± 5% @ 0.1 A -50% & 50% -100% load change, Slew rate 2.5 A/us, 100 to 10 KHz, 50% Duty Cycle	

*PARD is measured with an AC coupling mode, and in parallel with 0.1uF ceramic capacitor & 47uF electrolytic capacitor.

Mechanical

Case	PC	
Dimensions (L × W × H)	160 x 76.2 x 25.8 mm (6.3 x 3 x 1.02 inch)	
Unit Weight	405 ±10 grams (14.29 ±0.35 ounces)	
Indicator	N/A	
Cooling System	Convection	
Output Cable Specification	Connector	Tuning fork (O.D: 5.5 mm, I.D: 2.5 mm, length: 11 mm)
	Length	UL1571 #17AWG , 1800 mm
Input Socket	C6	

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Environment

Surrounding Temperature	Operating	-10°C to +60°C
	Storage	-40°C to +85°C
Power De-Rating	>40°C de-rated by 2.5%/°C	
Operating Humidity	5%-95% RH (non-condensing)	
Operating Altitude	5,000 meters (16,400 feet)	
Ball Impact Test	Test height 130 cm, 1 sample 1 time, Steel Ball 500 g, Concrete floor	
Drop Test	Test height 100 cm, 6 face for each sample, concrete floor Function test pass after drop test	
Shock Test (Non-Operating)	50 G, 11 ms, 1 shock for each direction	
Vibration (Non-Operating)	5-500 Hz, 2.09 Grms, 20 mins, one cycle for each three axis	

Protections

Overvoltage (max)	33 V, Latch mode
Overload / Overcurrent (max)	120-180% , Latch
Over Temperature	Latch Mode
Short Circuit	Latch Mode
Pollution Degree	2
Protection Against Shock	Class I

Reliability Data

MTBF	> 300,000 hrs. per Telcordia SR-332 at Input: 115 Vac, Output: 100% load, Ta: 25°C
Expected Cap Life Time	5 years (50% load @ 25°C)

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Safety Standards / Directives

Electrical Safety		IEC /EN 60950-1 ; IEC/UL/EN 62368-1
		BSMI CN S14336-1
		CCC GB 4943.1-2011
		PSE J 60950-1 (H29)
		KC K 60950-1
CE		Comply with EMC Directive 2014/30/EU and the Low Voltage Directive 2014/35/EU
UKCA		In conformance with Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016
Galvanic Isolation	I/P to O/P	3000 Vac

EMC

EMC / Emissions		CISPR/EN/BS EN 55032 Class B BSMI CNS 13438 GB/T 9254-2008 KN 32
Harmonic Current Emissions	IEC 61000-3-2	Class D ; GB 17625.1-2003
Immunity to		EN/BS EN 55024; KN 35
Voltage Flicker	IEC 61000-3-3	
Electrostatic Discharge	IEC 61000-4-2	Level 4 Criteria A ¹⁾ Air Discharge: 15 kV Contact Discharge: 8 kV
Radiated Field	IEC 61000-4-3	Level 2 Criteria A ¹⁾ 80 MHz – 1 GHz, 3 V/m , 80% AM (1 KHz)
Electrical Fast Transient / Burst	IEC 61000-4-4	Level 2 Criteria A ¹⁾ : 1 kV
Surge	IEC 61000-4-5	Level 3 Criteria A ¹⁾ Common Mode ⁴⁾ : 2 kV Differential Mode ⁵⁾ : 1 kV
Conducted	IEC 61000-4-6	Level 2 Criteria A ¹⁾ 150 kHz – 80 MHz, 3 Vrms, Sine Wave, 80%, AM modulation
Power Frequency Magnetic Fields	IEC 61000-4-8	Level 1 Criteria A ¹⁾ Magnetic field strength 1 A/m
Voltage Dips	IEC 61000-4-11	Voltage dips 70% reduction/0.5 periods (Criterion B ²⁾) 40% reduction/5 periods (Criterion C ³⁾) Voltage short interruptions 5% reduction/250 periods (Criterion C ³⁾)

1) Criteria A: Normal performance within the specification limits

2) Criteria B: Output out of regulation, or shuts down during test. Automatically restore to normal operation after test.

3) Criteria C: PSU shuts down during test, but need operator to reset.

4) Asymmetrical: Common mode (Line to earth)

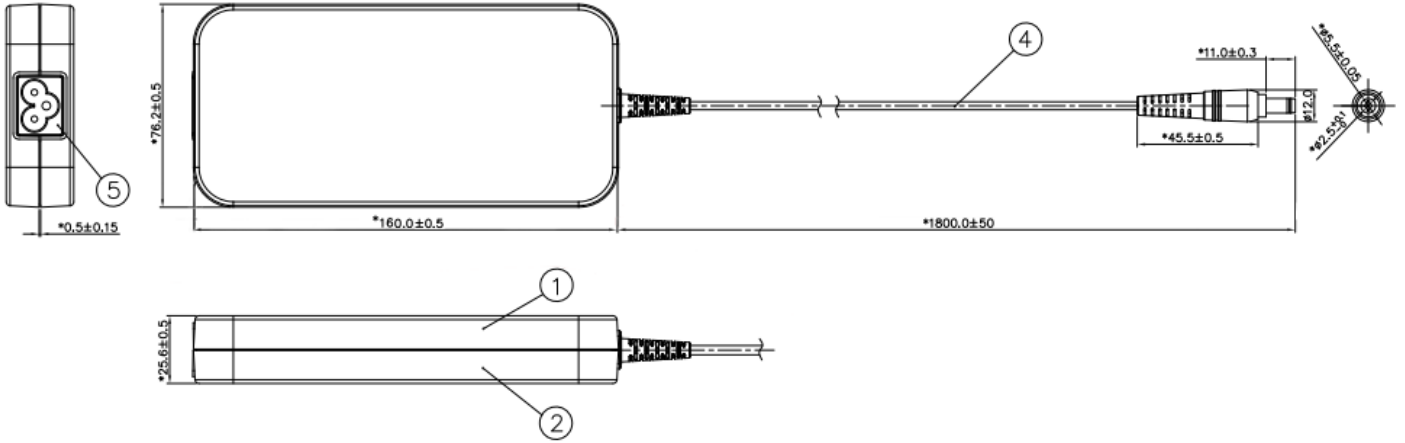
5) Symmetrical: Differential mode (Line to line)

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Dimensions

L x W x H: 160 x 76.2 x 25.8 mm (6.3 x 3.0 x 1.02 inch)



Engineering Data

Output Load De-rating V.S. Surrounding Air Temperature

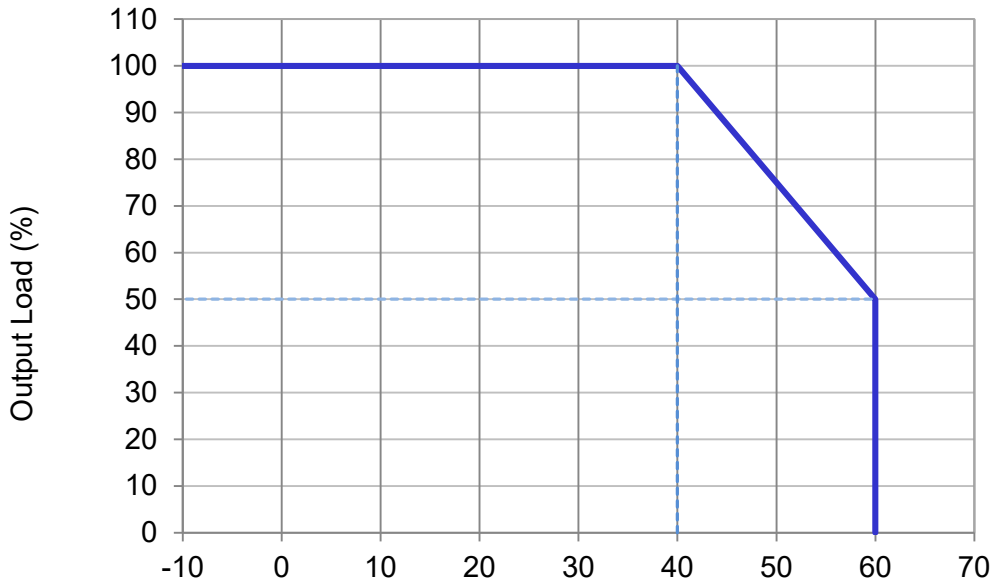


Fig. 1 De-rating for All Mounting Orientation
 > 40°C de-rate power by 2.5% / °C

AC-DC Adapter

24 V 150 W / ADT-150A24AA H-A

Others

Attention

Delta provides all information in the datasheets on an "AS IS" basis and does not offer any kind of warranty through the information for using the product. In the event of any discrepancy between the information in the catalog and datasheets, the datasheets shall prevail (please refer to www.DeltaPSU.com for the latest datasheets information). Delta shall have no liability of indemnification for any claim or action arising from any error for the provided information in the datasheets. Customer shall take its responsibility for evaluation of using the product before placing an order with Delta.

Delta reserves the right to make changes to the information described in the datasheets without notice.

Manufacturer and Authorized Representatives Information

Manufacturer

Thailand

Delta Electronics (Thailand) PCL.
909 Pattana 1 Rd., Muang, Samutprakarn, 10280 Thailand

Taiwan

Delta Electronics, Inc.
3 Tungyuan Road, Chungli Industrial Zone, Taoyuan County
32063, Taiwan

Authorized Representatives

The Netherlands

Delta Greentech (Netherlands) B.V.
Zandsteen 15, 2132 MZ Hoofddorp, The Netherlands

United Kingdom

Delta Electronics Europe Limited
1 Redwood Court, Peel Park Campus,
East Kilbride, Glasgow, G74 5PF, United Kingdom

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Desktop AC Adapters](#) category:

Click to view products by [Delta](#) manufacturer:

Other Similar products are found below :

[212A2136](#) [SWA-1202](#) [SWA-1501](#) [212A2220](#) [432703037451](#) [KR8-PS01](#) [1894875](#) [FWE050024B-10A](#) [820A4080G](#) [825A0057-03](#) [SWA-1704W](#) [SDI65-24-UDC-P5R](#) [TRH21A120-49E03-Level-VI](#) [FWC100024A-11A](#) [FWE050012B-10A](#) [AC-DC ADAPTER 90W w/ Cable](#) [FWA065024A-11A](#) [PSA120U-560L6](#) [FWE050024A-10A](#) [96PSA-A63W18V1-M](#) [1895235](#) [69-D72](#) [PW-C0725-W2-B](#) [57-U1](#) [57-U2](#) [CENB1040A1245F02](#) [SED80N2-16.0](#) [SED80N3-16.0](#) [RFQ43442-01](#) [50966124050E](#) [96PSA-A36W12R1-3](#) [PCM50UT04](#) [PCM50UT05](#) [TRH100A240-11E12 VI](#) [TRE36A120-01G03 VI](#) [NPB-360-12XLR](#) [NPB-360-24XLR](#) [NPB-750-24](#) [SYS1588-3015-T2](#) [SYS1588-3018-T2](#) [SYS1588-3024-T2](#) [DTE150-24SX-F-W6](#) [96PSA-A60W12V1-4](#) [63040-010036-210-RS](#) [96PSA-A60W12W7-3](#) [SPU45-105](#) [96PSA-A100W18D4-M3](#) [63040-010120-210-RS](#) [96PSA-A60W12R1-3](#) [TR70MB240-02E03](#)