

# ARTESYN DCH3 SERIES

3 Watts



Advanced Energy's Artesyn DCH3 series of 3 watt plug-in wall-mount AC-DC power adapters that have been upgraded to meet Level VI efficiency requirements.

DCH3 series Efficiency Level VI power adapters feature a compact, slim width design that does not block adjacent AC outlets. Available with three different types of AC plug, the adapters also offer a choice of micro USB 2.0 or mini USB 2.0 connector on their output cable. The adapters accept a wide 100—240 Vac input and use high efficiency switch-mode power conversion technology to provide a regulated 5 Vdc output that can deliver up to 0.55 amp.

## DATA SHEET

### Total Power:

3 Watts

### Input Voltage:

100 - 254 Vac

### # of Outputs:

Single

### SPECIAL FEATURES

- USB switching wallmount power supply
- Universal AC input
- Available in multiple AC plug configurations
- CE Mark EMC & LVD, & ErP 2011 for EU versions
- Regulated output
- Overload and short circuit protection
- Constant voltage, constant current
- Efficiency Level VI
- Built in EMI filter (CISPR 22 Class B)
- Available in various output connectors
- Mini USB 2.0 dc output plug - 0005
- Micro USB 2.0 dc output plug - 0006

### SAFETY

- UL 60950/6500
- cUL 60950/6500
- TUV 60950
- NEMKO 60950
- CB Certificate and report
- CE EMC,LVD & ErP 2011 for EU & UK versions
- CTIA
- ENEC

## ELECTRICAL SPECIFICATIONS

Input	
Input range	100 - 240 Vac (wide range)
Frequency	47 - 63 Hz
EMI/RFI	FCC Part 15, Subpart B Class B & EN55022 (CISPR 22) Class B & EMC89/336/EEC
Safety ground leakage current	10 $\mu$ A @ 50/60 Hz, 230 Vac input
Output	
Voltage (Vo)	5 V (4.75 - 5.25 V)
Maximum power (Po)	3 W
Hold-up time	25 ms. typical at full load @ 115 Vac
Overvoltage protection	Single fault 10.5 V max. latching type
Overload protection	Output short circuit protection auto recover Overload protected > 800 mA
Output	DC cable with Mini USB 2.0 -0005 suffix and Micro USB 2.0 -0006
Connector pinout	Pin 1: +V Pin 5: ground

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature	0° to 45 °C ambient
Storage temperature	-20 °C to +70 °C
Electromagnetic susceptibility	Designed to meet EN55082-1
Humidity	Operating; non-condensing 20% to 90% RH
Vibration	Per IEC 60068-2-6

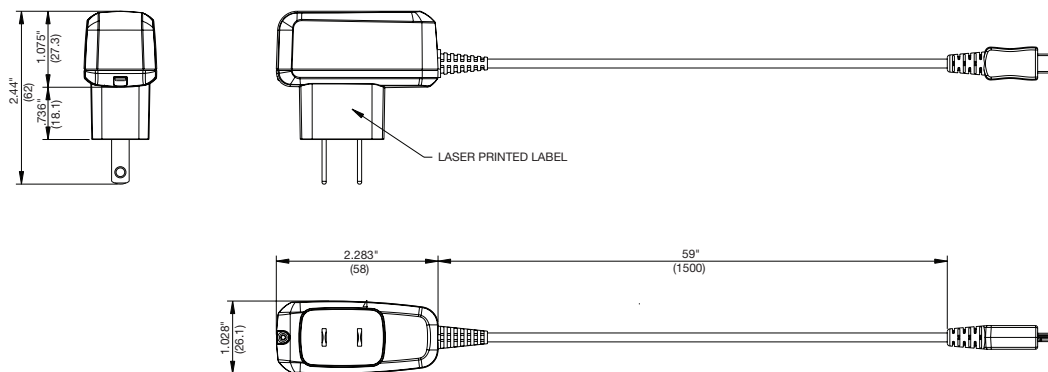
ORDERING INFORMATION

Model Number	Maximum Power	Output Voltage	Minimum Load	Maximum Load	Ripple P/P (PARD) <sup>1</sup>	Connector
DCH3-050US-0005	3 W	5 V	0	0.55 A	200 mV	Mini USB 2.0
DCH3-050EU-0005	3 W	5 V	0	0.55 A	200 mV	Mini USB 2.0
DCH3-050UK-0005	3 W	5 V	0	0.55 A	200 mV	Mini USB 2.0
DCH3-050US-0006	3 W	5 V	0	0.55 A	200 mV	Micro USB 2.0
DCH3-050EU-0006	3 W	5 V	0	0.55 A	200 mV	Micro USB 2.0
DCH3-050UK-0006	3 W	5 V	0	0.55 A	200 mV	Micro USB 2.0

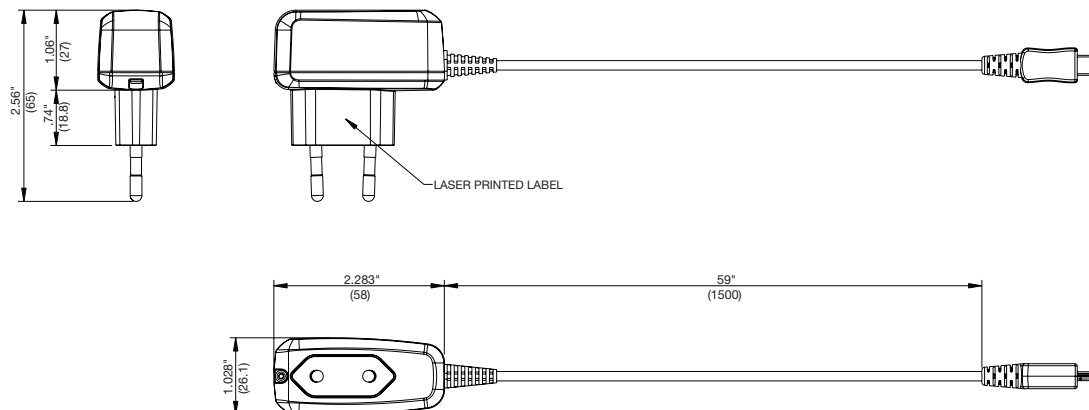
1. Peak-to-peak with 20 MHz bandwidth and 10 μF (tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
2. Output should not be grounded for EMI purpose.

MECHANICAL DRAWING

DCH3-050US - 0005 & 0006

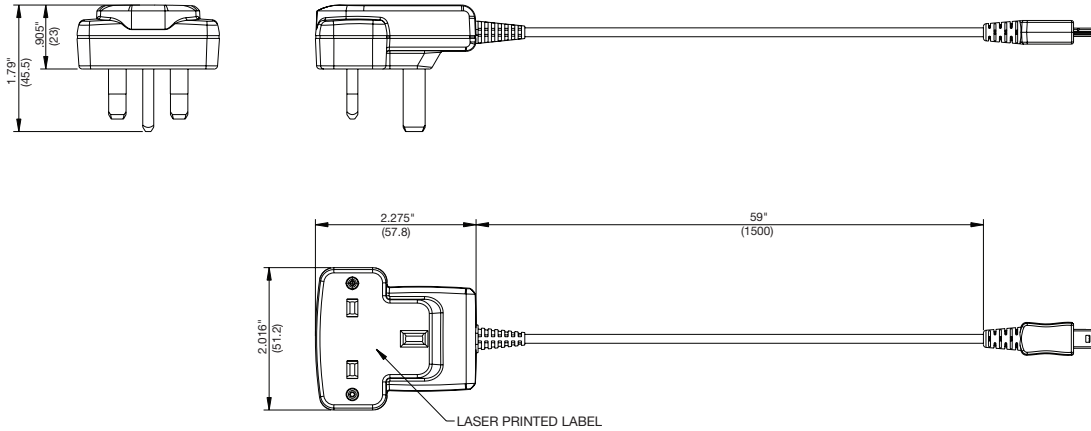


DCH3-050EU - 0005 & -0006

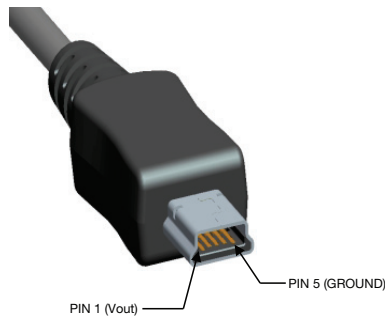


MECHANICAL DRAWINGS (CONTINUED)

DCH3-050UK - 0005 & - 0006



PIN ASSIGNMENTS



Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm .02$ ".
- 3. Warranty: 2 years
- 4. Weight: 0.144 lb./0.066kg.



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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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