

MW155

120 Watt Medical Adapter Series



- 100-240 VAC Universal Input
- PFC Corrected
- Low Life-Cycle Operation Cost
- Desktop Style
- Complies with EMI/RFI Regulations
- CE compliant (LVD, EMC, WEEE, RoHS)
- Impact Resistant, Non-vented Polycarbonate Enclosure
- IPX1 Compliant
- Modified and Custom Designs also Available
- Meets ENERGY STAR Criteria Level IV and EISA Requirements — see reverse side for details



International Safety Standard Approvals



Specifications

Output Specifications

Line and Load Voltage Regulation	Excluding Cord	±1%
Ripple		1% Vp-p max.
Transient Response		5ms max. for 50% load change, slew rate of 0.1A/μs
Protection		Cycle-by-cycle current limiting, automatic recovery for overload or short circuit; active latch-off OTP; active latch-off OVP

Input Specifications

Voltage	100-240VAC nominal
Line Frequency	47-63Hz
Input Current	2.0A max.
Protection	Input fuse

Environmental Specifications

Thermal Performance	Operating Temperature	0° C to 40° C with no Derating
Cooling	Convectional	Non-ventilated Enclosure
Relative Humidity	Non-condensing	5% to 95%
Altitude		0-10,000 feet
Storage Temp		-20° C to +85° C

General Specifications

Topology	Two stage power conversion, current-mode control
Efficiency	Energy Star Level IV
Certifications	UL60601-1, TUV-EN60601-1, IEC 60601-1
Hold-up Time	16.7ms min.
MTBF	200,000 Hours
Weight	24 oz (684 g)
Case and Dimension	6.6L X 3.2W X 1.6H (in) 167L X 82W X 40H (mm)
Case Material	94V-0 Polycarbonate, Black
Cord	6 ft (1.8m), 4-conductor, 18AWG standard

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For the most current data and application support visit www.sipower.com

Ault Part Number	Output Voltage	Output Currents		Max Watts
		Min	Max	
MW155RA1251F01	12 V	0.00 A	9.17 A	110.0 W*
MW155RA1551F01	15 V	0.00 A	7.33 A	110.0 W
MW155RA1851F01	18 V	0.00 A	6.67 A	120.0 W
MW155RA2451F01	24 V	0.00 A	5.00 A	120.0 W

*12V model rated 100W with input voltages rated 100-110VAC, 110W with input voltages rated 110VAC-240VAC

Ault Part Number Key

MW155	R	A	24	51	F	01
Product Family Name	Manufacturing Location	Type Revision	Output Voltage	Output Connector Style	Input Connector Style	Standard Item (other numbers for custom)

General Specifications (continued from p. 1)

EMI Compliance
 EN55011 and FCC conducted and radiated Class B
 IEC 61000-3-2 Class D
 IEC 61000-4-2 (ESD), CD level 2 and AD level 3, criterion B
 IEC 61000-4-3 (RFS), level 2, criterion A
 IEC 61000-4-4 (EFT), level 2, criterion A
 IEC 61000-4-5 (Surge), level 3, criterion B

Input Connectors



IEC320
w/ground
C14
(F)

Optional Features

Various output cord wire gauges and connector styles available. See Ault connector style sheets for connector options

"Power-on" LED

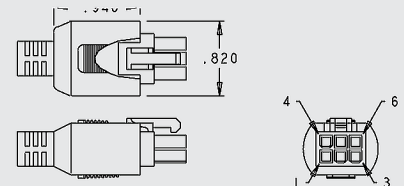
Active, Latch-off over temperature protection circuit

Synchronous rectification

Private label marking

Output Connectors

51



Ault #51 Minifit over molded connector standard

2007 Energy Independence and Security Act – EISA

The Energy Independence and Security Act of 2007 was passed in December of 2007 and addresses minimum efficiency standards and standby levels for Class A external power supplies that are 250 watts and under. This law stipulates that external power supplies manufactured on July 1, 2008 and beyond meet certain minimum efficiency and standby criteria as defined below.

Minimum Efficiency Criteria

Active mode is defined as when a power supply's input is connected to line voltage AC and its output is connected to a DC or AC load drawing a portion of the product's power output. Depending on the power rating for the power supply, it must meet the minimum efficiency criteria outlined below.

Energy-Efficiency Criteria for Active Mode:

output power on adapter label	minimum average efficiency percentage
0 to < less than 1 watt	$\geq 0.50 \times \text{output power on adapter label}$
> 1 to ≤ 51 watts	$\geq [0.09 \times \ln(\text{output power on adapter label})] + 0.50$
> 51 watts	≥ 0.85

The power supply must also meet a requirement for when its input is connected to a line voltage AC but its output is not connected to a load. Depending on the power output of the supply, it must keep its energy consumption below the following values.

Energy Consumption Criteria for No Load Mode:

output power on adapter label	maximum power consumption in no-load mode
0 to < 250 watts	≤ 0.5 watts

