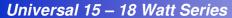
# **MW172KB**



# Medical Switch-Mode Power Supply

### 3 Year Warranty

- ·100-240VAC Universal Input
- ·Desktop and Wall-Plug Style with Interchangeable Blades\* (Kit sold separately)
- •3.3V to 24V Single Output Models, up to 18W
- ·Modified and Custom Designs
- ·Regulated Output with Low Ripple
- ·Impact-Resistant Polycarbonate Enclosure
- •No load Power Consumption < 0.50W
- •Designed to meet EISA Requirements (see page 3 for details).





International Safety Standard Approvals

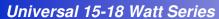






| Specifications                                       | All Specific  | ations are typical at nominal inp | out, full load at 25°C unles              | s otherwise stated.   |  |  |
|--|---|-----------------------------------|---|---|--|--|
| Output Specifications                                |   | <b>General Specification</b>      | ns en |   |  |  |
| Line and Load Excluding Voltage Regulation           | Cord Line: +/-1%<br>Load: +/-5%                                 | Topology                          | Topology                                  |   |  |  |
|  |   | Efficiency                        |   | Designed to meet EISA   |  |  |
| Ripple   | 1% Vp-p max.  |                                   |   | Requirements - see page 3   |  |  |
| Transient Response                                   | 0.5mS for 50% Load Change, typical.                             | Hold-up Time                      | @ 115VAC                                  | 18mS, min.  |  |  |
| Protection   | Overcurrent Protection<br>(Hiccup).<br>Short Circuit Protection | Dialectric Withstand              |   | 4,000VAC or 5,656VDC Primary-Secondary; 1,500VAC or 2,150VDC Primary - F.G; 500VDC Secondary - F.G.   |  |  |
| Input Specifications Input Voltage Range Universal I | nput 100-240VAC, -10%, +10%                                     | Storage Temp.                     | Storage Temp.                             |   |  |  |
| 1 0 0  |   | Approvals and<br>Safety Standards |   | UL60601-1<br>IEC/EN60601-1  |  |  |
| Line Frequency Input Current 90 VAC                  | 47-63Hz<br>0.4A, max.   |                                   |   | EMC: EN60601-1-2/<br>EN55024  |  |  |
| Protection   | Internal Primary Current Fuse,                                  | MTBF                              | MTBF                                      |   |  |  |
|  | Temperature 0° C to 40° C                                       | Case and<br>Dimensions            |   | Desktop Style:<br>3.3"L x 1.81"W x 1.26"H<br>84.6mm L x 46mm W x 33mm<br>H                            |  |  |
| Performance full load, no                            | o derating,<br>I cooling, Non-                                  | Case Material                     |   | Black 94V0 Polycarbonate  |  |  |
| vented cas   |   | Cord and<br>Connectors            |   | 18AWG, 1,800mm 2<br>conductor. (5V, 6V model:<br>1,500mm). Ault #3 connector.<br>Other connectors are |  |  |
| Relative Humidity Non-conde                          | ensing 5% to 95%  |                                   |   |   |  |  |
| Altitude   | 0 to 10,000 feet  |                                   |   | available.  |  |  |

# **MW172KB**



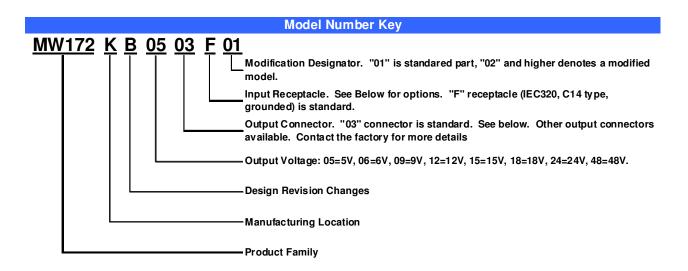


# Medical Switch Mode Power Supply

### 3 Year Warranty

| OUTPUT PARAMETERS |           |                      |           |                   |  |  |  |  |
|-------------------|-----------|----------------------|-----------|-------------------|--|--|--|--|
| Model Number      | Volts (V) | Output Current (max) | Max Watts | Ripple (Vp-p max) |  |  |  |  |
| MW172KB0503F01    | 5 V       | 3.00 A               | 15.0 W    | 50mV              |  |  |  |  |
| MW172KB0603F01    | 6 V       | 2.50 A               | 15.0 W    | 60mV              |  |  |  |  |
| MW172KB0903F01    | 9 V       | 2.00 A               | 18.0 W    | 90mV              |  |  |  |  |
| MW172KB1203F01    | 12 V      | 1.50 A               | 18.0 W    | 120mV             |  |  |  |  |
| MW172KB1503F01    | 15 V      | 1.20 A               | 18.0 W    | 150mV             |  |  |  |  |
| MW172KB1803F01    | 18 V      | 1.00 A               | 18.0 W    | 180mV             |  |  |  |  |
| MW172KB2403F01    | 24 V      | 0.75 A               | 18.0 W    | 240mV             |  |  |  |  |

Note: Part numbers above include #3 output connector and IEC320 C14 grounded input receptacle. See below for other options.



| Input Receptacle Options |            |                   |                 |            |                      |         |           |  |  |
|--------------------------|------------|-------------------|-----------------|------------|----------------------|---------|-----------|--|--|
| DESKTOP OPTIONS          |            | WALL-PLUG OPTIONS |                 |            |                      |         |           |  |  |
| ••                       |            | $\boxed{\bullet}$ |                 |            | $\overline{\bullet}$ |         | ••        |  |  |
| IEC 320                  | IEC320     | IEC320            | N. America      | N. America | Europe               | United  | Australia |  |  |
| C14                      | C18        | C8                | Japan           | Japan      |                      | Kingdom |           |  |  |
| Grounded                 | Ungrounded | "Shaver"          | Interchangeable | Fixed      | Fixed                | Fixed   | Fixed     |  |  |
| (F)                      | (Q)        | (N)               | (B)             | (C)        | (M)                  | (G)     | (E)       |  |  |

Notes: 1. For Desktop options, choose the applicable letter above.

- 2. For Wall-plug options, choose the applicable letter above. The model will then be fitted only with the receptacle chosen. The North American blade version (B) will be an interchangeable blade. The other options (C), (M), (G), and (E), will be fixed blades molded in the case.
- 3. Blade Kit is available which will include one each of a EU, UK, and Aust blade. Kit part number is KT1027K. Can be used with (B) version only, to allow blades to be interchanged.

# MW170KB





# Medical Switch Mode Power Supply

# 3 Year Warranty

#### 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 a line voltage AC and it's output is connected to a DC or AC load, drawing a portion of the product's power output. Depending upon the power rating for the power supply, it must meet the minimum efficiency criteria outlined below.

#### **Energy-Efficiency Criteria for Active Mode:**

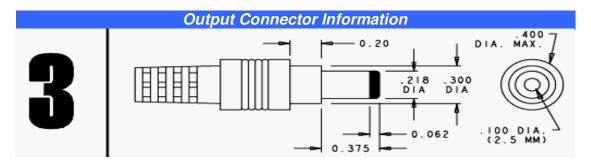
Output Power on Adapter Label
0 to < 1 Watt
> 1 watt to ≤ 51 watts
> 51 watts

Minimum Average Efficiency Percentage  $\geq 0.50$  \* output power on the label  $\geq [0.09$  \* Ln (output power on adapter label)] + 0.50  $\geq 0.85$ 

#### **Energy Consumption Criteria for No Load Mode:**

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

Output Power on Adapter Label 0 to < 250 Watts <u>Maximum Power Consumption in No-Load Mode</u> ≤ 0.50 watts



### Notes:

- 1. Center Contact = Positive
- 2. Connector is Switchcraft 760 plug or equivalent.
- 3. Suggested Mating Connector is Switchcraft 712A jack or equivalent.
- 4. Other output connector options are available. Contact your local representative for details.

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