

# EXM80 Series

## 80 Watt

### AC/DC Wall-Plug Adaptor

Un-matched Power in an Adaptor



INNOVATED FOR YOU BY A LEADER IN MEDICAL POWER SUPPLIES

**powerbox**  
POWERING PROGRESS

# Medline EXM 80

80 WATTS AC/DC SINGLE OUTPUT MEDICAL ADAPTOR

## Key Features

- Highest output power on the market of wall plug adaptors
- Exchangeable AC-plugs for universal use
- Reliable front edge fly-back design with very low component count
- Very low leakage current
- Class II double isolation and UL/IEC60601-1 medical approval
- Made by Ulf Hanses, a world famous industrial designer

## Product Description

Medline EXM 80 Series is a high performance single output external AC/DC power supply providing 80 Watts output power in an attractive wall mount format. The industrial designer Ulf Hanses is responsible for the exterior design of Medline EXM 80. Ulf Hanses is well known for genuinely humorous, yet restrained designs during the last 25 years.

Electrically Medline EXM 80 features the latest fly-back topology and it is ready for world wide AC inputs. The leakage current is kept to a minimum allowing the power supplies in the Medline EXM 80 Series to be used in various medical applications. Medline EXM 80 Series also features exchangeable AC plugs for use in Europe, US, UK and Australia.

Single outputs 12, 15, 18 or 24VDC.

# Medline EXM 80

## SPECIFICATIONS



Four international AC plugs included.  
AC cable can be delivered as option

### INPUT

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| Nominal input range         | 100-240VAC.                                                                           |
| Voltage range               | 90-264VAC. 85-99V with 70% output power.                                              |
| Frequency                   | 50/60Hz.                                                                              |
| Input current               | 1.7A.                                                                                 |
| Inrush current              | Max 50A peak, cold start.                                                             |
| Input connector             | C8 cable connector or exchangeable input connectors for Europe, US, UK and Australia. |
| Leakage current             | <100µA.                                                                               |
| Isolation class             | Class II. Double isolation, type B applied part.                                      |
| Zero load power consumption | Approx 0,5 Watts at 110 VAC input.                                                    |

### OUTPUT

|                           |                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------|
| Power                     | Up to 80W, see table.                                                                  |
| Voltage                   | See table.                                                                             |
| Tolerance                 | 5%.                                                                                    |
| Ripple and noise          | Typ. 1% p-p max (20MHz BW). 5% at ≤110VAC input.                                       |
| Efficiency                | 87-90% @ 230VAC full load.                                                             |
| Hold up time              | 35ms at 230VAC.                                                                        |
| Start up time             | <2s max.                                                                               |
| Line regulation           | 1% max full load. 5% at ≤100VAC input.                                                 |
| Load regulation           | 2% max @ 230VAC, 10-90% load change at adapter output terminal. Output cable excluded. |
| Overcurrent protection    | Approx 125%, auto recovery.                                                            |
| Current limiting charact. | Constant current.                                                                      |
| Transient response        | 4ms max, 1ms typical.                                                                  |
| Temperature coefficient   | Typ 0.04%/°C of Vout.                                                                  |
| Output cable              | 2m, flexible. 1 wire cable, diameter 4mm. Internal wires AWG16 white colour.           |
| Output connector          | Barrel plug. 2.5/5.5/9.2mm, centre plus, white colour.                                 |
| Recommended connector     | Cliff type FC 68149, 5.5/2.5mm or FC681446 or equivalents.                             |

### ENVIRONMENTAL

|                       |                           |
|-----------------------|---------------------------|
| Operating temperature | 0°C to +40°C.             |
| Storage temperature   | -40°C to +75°C.           |
| Humidity              | 5% to 95% non-condensing. |
| RoHS                  | Unit complies with RoHS.  |

### GENERAL

|                     |                                                               |
|---------------------|---------------------------------------------------------------|
| Switching frequency | 40-80kHz.                                                     |
| Dimensions          | 118 x 45 x 70mm excl ac plugs.                                |
| Weight              | Max 300g including one ac plug.                               |
| Protection class    | Designed to meet IP50. (AC connector excluded).               |
| Case                | 94V0. Polycarbonate. White colour.                            |
| MTBF                | >300,000 h at 25°C ambient temperature.<br>50 years power on. |
| Lifetime prediction | Min 80,000 h at 22°C, 230VAC and 50% load.                    |
| Indicator           | "On" indicates with green LED.                                |
| Cleaning            | Use dry towel. Do not soak in water.                          |

### STANDARDS

|                                  |                                                                                                                               |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Safety standards                 | Approved according to IEC/UL60601-1 including deviations for Europe, US & Canada by Intertek Semko & UL. Fulfills IEC60950-1. |
| Safety markings                  | S, ETL, UL & CE.                                                                                                              |
| EMC standards                    | IEC60601-1-2, IEC61204-3, EN55011 class B.                                                                                    |
| Harmonic current emissions       | IEC61000-3-2.                                                                                                                 |
| Voltage fluctuations and flicker | IEC61000-3-3.                                                                                                                 |
| ESD susceptibility               | IEC61000-4-2, ±6kV contact discharge, ±8kV air discharge.                                                                     |
| Radiated susceptibility          | IEC61000-4-3, 3V/m.                                                                                                           |
| EFT/Burst                        | IEC61000-4-4, ±2kV on AC port, ±1kV on signal ports.                                                                          |
| Surge                            | IEC61000-4-5, ±2kV common mode, ±1kV differential mode.                                                                       |
| Conducted susceptibility         | IEC61000-4-6, 3V/m                                                                                                            |
| Power frequency magnetic field   | IEC61000-4-8, 3A/m.                                                                                                           |
| Dips and interruptions           | IEC61000-4-11, 30% 500ms, 60% 100ms, 95% 5sec. Performance criteria A A* B.                                                   |

\* at 100-160 VAC nominal input voltage performance criteria B

### AC PLUGS MEDLINE EXM 80



| MODEL NUMBER | OUTPUT VOLTAGE | CONTINUOUS OUTPUT CURRENT | CONTINUOUS OUTPUT POWER | PEAK OUTPUT CURRENT*) | PEAK OUTPUT POWER*) |
|--------------|----------------|---------------------------|-------------------------|-----------------------|---------------------|
| EXM 80 5118  | 12V            | 5A                        | 60W                     | 5.5A                  | 70W                 |
| EXM 80 5119  | 15V            | 4A                        | 60W                     | 4.7A                  | 70W                 |
| EXM 80 5120  | 18V            | 3.6A                      | 65W                     | 4.2A                  | 75W                 |
| EXM 80 5121  | 24V            | 2.9A                      | 70W                     | 3.3A                  | 80W                 |

\*) Max duration 30 sec. per every 10 minutes.

Specifications are subject to change without notice.