# EXM80 Series 80 Watt AC/DC Wall-Plug Adaptor

Un-matched Power in an Adaptor





powerbox 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.



## Medline EXM 80 SPECIFICATIONS Four international AC plugs included.

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	<100μΑ.		
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**

AC cable can be delivered as option

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.			
	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	IEC61000-3-2.
emmissions	
Voltage fluctuations	IEC61000-3-3.
and flicker	
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	IEC61000-4-8, 3A/m.
magnetic field	
Dips and interruptions	IEC61000-4-11, 30% 500ms, 60% 100ms, 95%

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

#### **AC PLUGS MEDLINE EXM 80**









5sec. Performance criteria A A\* B.



MODEL	OUTPUT	CONTINUOUS	CONTINUOUS	PEAK OUTPUT	PEAK OUTPUT
NUMBER	VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	CURRENT*)	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

<sup>\*)</sup> Max duration 30 sec. per every 10 minutes.

Specifications are subject to change without notice.