

Switchmode Power Supplies Medical Series

with exchangeable primary adapters
(MPP 15/30)

All products conform to IEC 60601-1

Applications

- Blood analyser
- Patient monitors
- Measuring equipment
- Laboratory equipment
- Inhalers
- Patient lifts

Characteristics

- Universal input 100 to 240 V AC
- Constant voltage, current limited
- Green LED indicator
- Low standby power
≤ 0.3 Watts (PP 8) resp.
≤ 0.5 Watts (MPP 15/30)
- Continuously short circuit proof
- Exchangeable primary adapters (MPP 15/30)

Technical data

Input voltage Input current

100 to 240 V AC ($\pm 10\%$)
200 mA (PP 8), 400 mA (MPP 15),
700 mA (MPP 30)

Frequency

50 to 60 Hz

Efficiency

80 % typ. at full load, PP 8 75%

EMC

Conforms to
EN 55011, EN 55022/B,
FCC 47 part 15, EN 61000-3-2,
EN 61000-4-2, EN 61000-4-3,
EN 61000-4-4, EN 61000-4-5,
EN 61000-4-6, EN 61000-4-11

Output voltage tolerance

$\pm 5\%$

Environmental specification

Operating temperature

0 to 40° C at maximum load

Storage temperature

-40 to 70° C, PP 8 (-20 to 70° C)

Humidity

5 % to 95 % non condensing

Input transient susceptibility

Complies with IEC 61000 requirements

Safety specification

Standards

Fulfil Class II SELV for the following applications:
IEC 60601-1, UL 2601, VDE, CE label,
fulfils medical application class B/BF/CF

Reliability specification

MTBF calculation

200,000 hours at maximum load
and an ambient temperature of 25° C
(in accordance with MIL-HDBK-217)

Mechanical specification

Weight approx.

110 g (PP 8), 160 g (MPP 15), 255 g (MPP 30)

Plug connector

AC input:
FRIWO exchangeable mains plug system:
EURO, UK, USA/Japan, Australia, IEC
PP 8: EURO, UK, USA/Japan
DC output:
Universal output plug system (page 30)

PP 8 FW 7333SM



MPP 15 FW 7555M

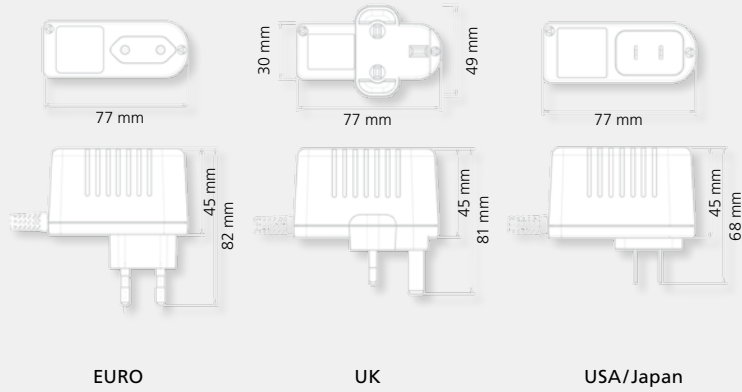


MPP 30 FW 7362M



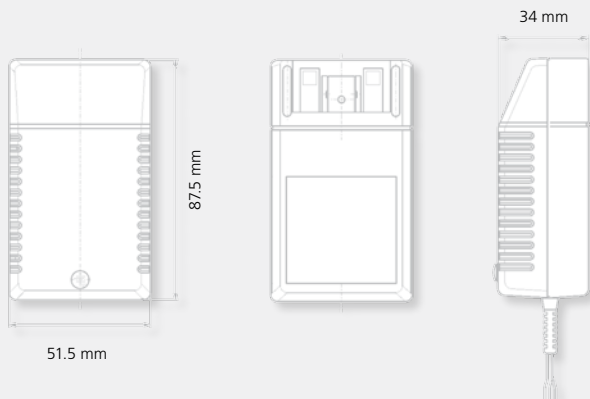
For primary adapters see page 30

8 Watts



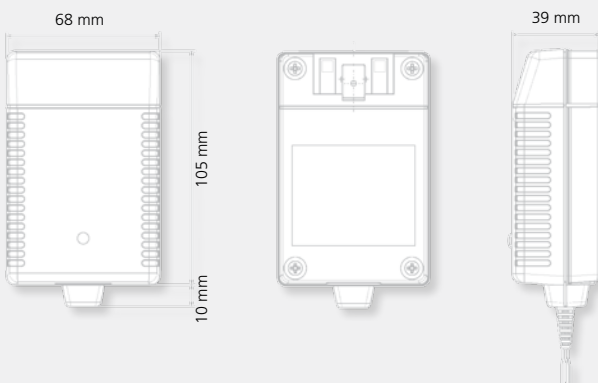
Output data		Ripple Voltage	EURO Order No.	USA/Japan Order No.	UK Order No.
Voltage	Current				
5 V	1300 mA	200 mV pp	1829500	1829589	1829571
6 V	1150 mA	180 mV pp	1829501	1829590	1829572
7.5 V	900 mA	150 mV pp	1829502	1829591	1829573
9 V	800 mA	150 mV pp	1829503	1829592	1829574
12 V	700 mA	150 mV pp	1829504	1829593	1829575
15 V	530 mA	150 mV pp	1829505	1829594	1829576
18 V	440 mA	150 mV pp	1829506	1829595	1829577
24 V	330 mA	150 mV pp	1829507	1829596	1829578

15 Watts



Output data			Worldwide Order No.
Voltage	Current	Ripple Voltage	
5 V	2400 mA	75 mV pp	1883256
6 V	2100 mA	75 mV pp	1883257
7.5 V	1700 mA	75 mV pp	1883258
9 V	1500 mA	90 mV pp	1883259
12 V	1250 mA	120 mV pp	1883260
15 V	1000 mA	150 mV pp	1883261
18 V	840 mA	180 mV pp	1883262
24 V	625 mA	240 mV pp	1883263

30 Watts



Output data			Worldwide Order No.
Voltage	Current	Ripple Voltage	
5 V	4000 mA	75 mV pp	1883264
6 V	3600 mA	75 mV pp	1883265
7.5 V	3300 mA	75 mV pp	1883266
9 V	3000 mA	90 mV pp	1883267
12 V	2500 mA	100 mV pp	1883268
15 V	2000 mA	100 mV pp	1883269
18 V	1660 mA	120 mV pp	1883270
24 V	1250 mA	120 mV pp	1883271