

## Switchmode Power Supplies

# MPP Series

with exchangeable primary adapters

All products conform to IEC 60950

### Applications

- Weighing technology
- WLAN modems
- Bluetooth
- Communication accessories
- Measurement technology
- LED applications
- Laser technology
- IT accessories
- Safety technology

### Characteristics

- Universal input 100 to 240 V AC
- Constant voltage, current limited
- Exchangeable primary adapters
- Low standby power  $\leq 0.3$  Watts
- Continuously short circuit proof
- High efficiency

### Technical data

#### Input voltage

100 to 240 V AC ( $\pm 10\%$ )

#### Input current

150 mA (MPP 6),  
400 mA (MPP 15),  
700 mA (MPP 30)

#### Frequency

50 to 60 Hz

#### Efficiency

80% typ. at full load, resp. 75% (MPP 6)

#### 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

#### Humidity

5% to 95% non condensing

#### Input transient susceptibility

Complies with IEC 61000 requirements

### Safety specification

#### Standards

Fulfills Class II SELV for the following applications: EN 60950/IEC 60950, UL 60950, CSA 950 (cUL), VDE, CE label

### 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.

100 g (MPP 6), 160 g (MPP 15), 255 g (MPP 30)

#### Plug connector

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

For primary adapters see page 30

**MPP 6** FW 7650



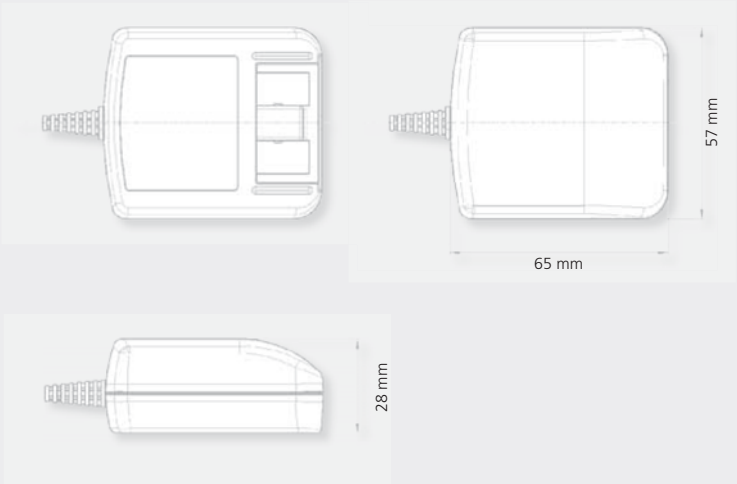
**MPP 15** FW 7555



**MPP 30** FW 7530

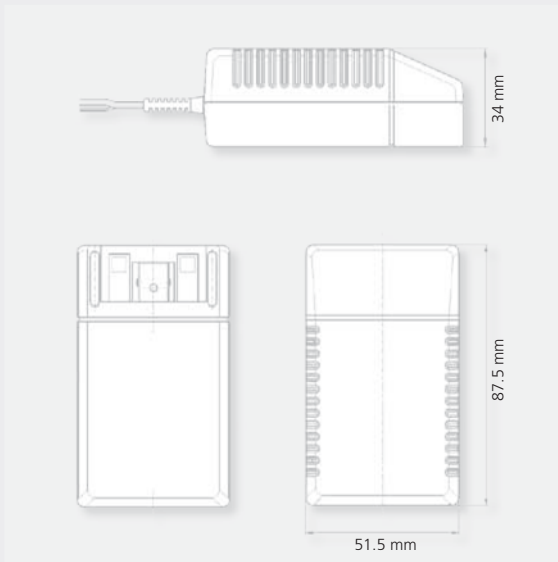


## 6 Watts



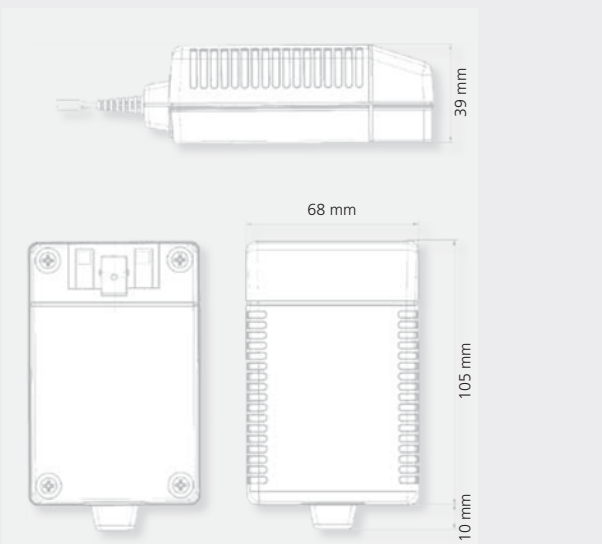
Output data			Worldwide
Voltage	Current	Ripple Voltage	Order No.
5 V	1000 mA	200 mV pp	1814926
6 V	850 mA	180 mV pp	1814927
7.5 V	650 mA	150 mV pp	1814928
9 V	550 mA	150 mV pp	1814929
12 V	450 mA	150 mV pp	1814930
15 V	360 mA	150 mV pp	1814931
18 V	300 mA	150 mV pp	1814932
24 V	220 mA	150 mV pp	1814933

## 15 Watts

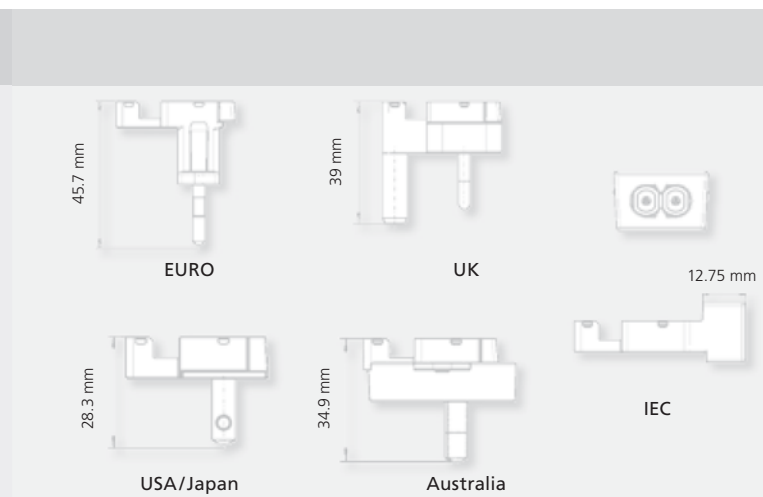


Output data			Worldwide
Voltage	Current	Ripple Voltage	Order No.
5 V	3000 mA	75 mV pp	1894100
6 V	2500 mA	75 mV pp	1894101
7.5 V	2000 mA	75 mV pp	1894102
9 V	1500 mA	90 mV pp	1811970
12 V	1250 mA	120 mV pp	1811971
15 V	1000 mA	150 mV pp	1812039
18 V	840 mA	180 mV pp	1812040
24 V	625 mA	240 mV pp	1812041

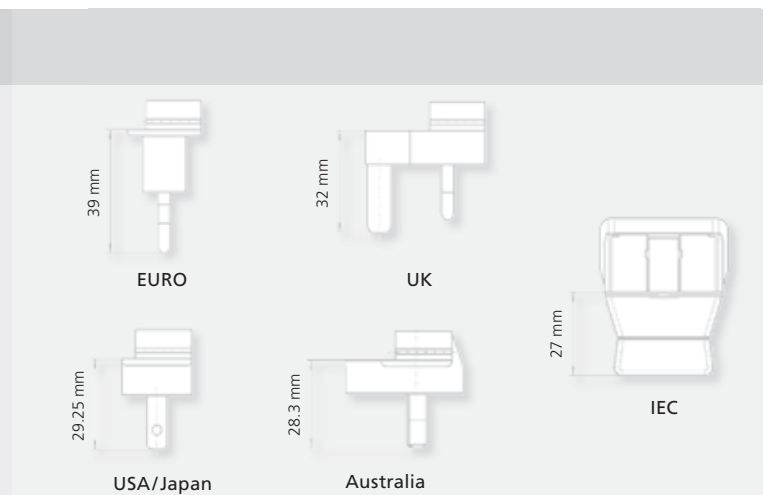
## 30 Watts



Output data			Worldwide
Voltage	Current	Ripple Voltage	Order No.
5 V	5000 mA	50 mV pp	1894090
6 V	4200 mA	60 mV pp	1894091
7.5 V	3600 mA	75 mV pp	1894092
9 V	3000 mA	90 mV pp	1894093
12 V	2500 mA	120 mV pp	1894094
15 V	2000 mA	150 mV pp	1894095
18 V	1650 mA	180 mV pp	1894096
24 V	1250 mA	240 mV pp	1894097



Primary adapter	GPP
Country	Order No.
<b>EURO</b>	<b>1827417</b>
<b>UK</b>	<b>1827420</b>
<b>USA/Japan</b>	<b>1827422</b>
<b>Australia</b>	<b>1827425</b>
<b>IEC</b>	<b>1827428</b>
<b>Korea</b>	<b>1835619</b>
<b>Argentina</b>	<b>1831610</b>
<b>India</b>	<b>1831323</b>
<b>China</b>	<b>1835620</b>
<b>Brasil</b>	<b>1835621</b>



Primary adapter	MPP
Country	Order No.
<b>EURO</b>	<b>1717707</b>
<b>UK</b>	<b>1717618</b>
<b>USA/Japan</b>	<b>1717715</b>
<b>Australia MPP 15</b>	<b>1800496</b>
<b>Australia MPP 6/30</b>	<b>1804237</b>
<b>IEC</b>	<b>1809281</b>
<b>Korea</b>	<b>1832029</b>

Straight coaxial connectors			
Ø out.	Ø in.	Length mm	Order No.
3.5	1.3	9.5	1807699
4.0	1.7	9.5	1822557
4.0	1.7	11.0	1811994
4.8	1.7	9.5	1822559
5.5	2.1	9.5	1807700
5.5	2.1	11.5	1807701
5.5	2.1	14.0	1807697
5.5	2.5	9.5	1807698
5.5	2.5	11.5	1807702
5.5	3.3	9.5	1822561
<b>DIN 45323</b>		<b>1807703</b>	

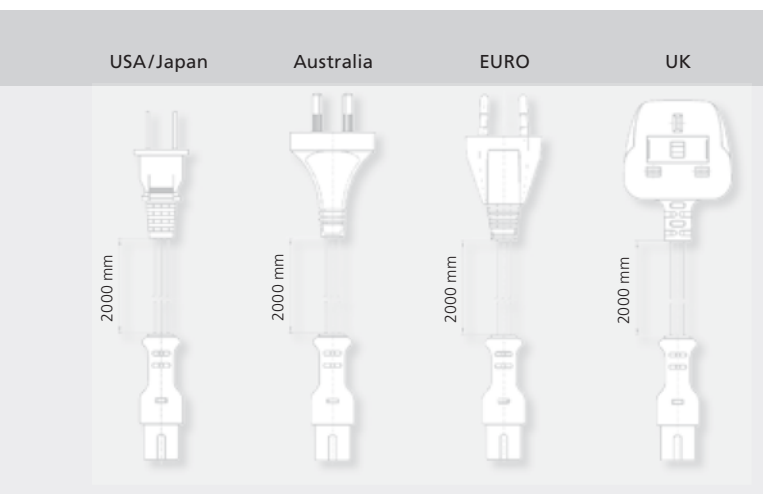
Angled coaxial connectors			
Ø out.	Ø in.	Length mm	Order No.
3.5	1.3	9.5	1822478
4.0	1.7	9.5	1822558
4.0	1.7	11.0	1822482
4.8	1.7	9.5	1822560
5.5	2.1	9.5	1822479
5.5	2.1	11.5	1822480
5.5	2.1	14.0	1822476
5.5	2.5	9.5	1822477
5.5	2.5	11.5	1822481
5.5	3.3	9.5	1822562
<b>DIN 45323</b>		<b>1822483</b>	

Straight jack connectors		
Ø out.	Length mm	Order No.
2.5	13	1807704
3.5	14	1807705

Angled jack connectors		
Ø out.	Length mm	Order No.
2.5	13	1822484
3.5	14	1822485

Connectors/sockets	
Description	Order No.
<b>Texas connector</b>	
<b>Straight Texas connector</b>	<b>1807706</b>
<b>Angled Texas connector</b>	<b>1822486</b>
<b>Texas sockets 2-pin</b>	
<b>Snap in type</b>	<b>1323938</b>
<b>PCB type</b>	<b>1321609</b>
<b>Texas sockets 3-pin</b>	
<b>Snap in type</b>	<b>1327259</b>
<b>PCB type</b>	<b>1363506</b>



Power cords	
Country	Order No.
<b>EURO</b>	<b>1812274</b>
<b>UK</b>	<b>1812275</b>
<b>USA/Japan</b>	<b>1812276</b>
<b>Australia</b>	<b>1812277</b>