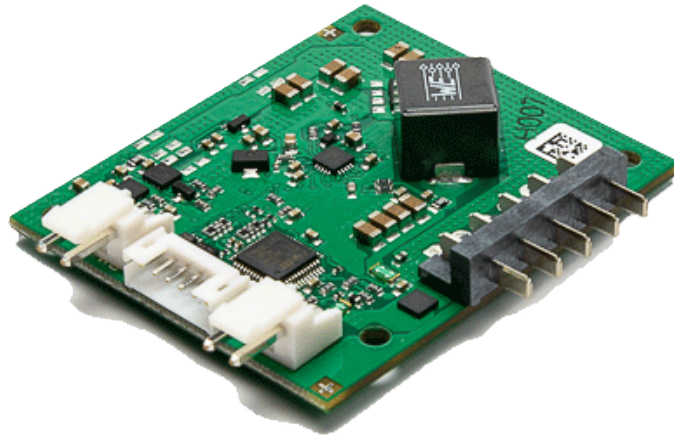


RRC-PMM240

Power Management Module for Mobile Applications

P/N: 100576



Features:

- 240.00W max. output power to application
- 82.00W max. output power to battery
- Automatic power source selection
- Wide DC input voltage range
- 3D data available of power management module and batteries for easy integration into user application
- Fits to standard smart batteries from RRC in form factor RRC20xx

Applications:

Power management and smart battery charging capability for medical and industrial applications

Specification

| Input (Power Supply Output) | |
|-----------------------------|---|
| Input voltage range | Max. 24.00VDC, min. Battery charge voltage +1.00V |
| Input power | 192.00W max. |
| Input current | 8.00A max. |
| Input fuse | 12.00A |
| Protection | Reverse polarity, short current |

| Application Output | |
|----------------------|--|
| Output voltage range | Equal to DC input voltage if ext. DC power supply is present. Equal to battery voltage if no ext. DC power supply is present. |
| Total output power | 240.00W max. |
| Output current | 10.00A max. |
| Output fuse | 12.00A |

| Power Management | |
|--|--|
| Automatic power source selection with seamless transition between ext. DC power supply and battery | |

| Battery Input / Output | |
|---------------------------|--|
| Battery charge voltage | Up to 19.20V ($\pm 0.5\%$) |
| Battery charge current | Up to 6.20A ($\pm 3\%$) |
| Battery charge power | Up to 82.00W |
| Battery discharge current | 10.00A max. |
| Protection | Battery short circuit, over temperature, over voltage, over current & reverse polarity |
| Standby current | Typical 1.00mA |

| Environmental Condition | |
|---------------------------------|-------------------------|
| Operating Temperature | -20° to 60°C |
| Transport & Storage Temperature | -20° to 60°C |
| Relative Humidity | 5% - 95% non-condensing |
| Ambient pressure | 500-1070hPa |

| User-Interface | |
|--|--|
| UI via GPIO / available info | Charging: yes/no Ext. DC power supply: yes/no Battery/hardware error |
| SMBus commands to set | Charge current limit, input current limit |
| Battery information available via standard SMBus | |

| Recommended Voltage for External AC/DC Power Supplies | | | | |
|---|----------------|----------------|-----------------|----------------|
| Battery architecture | 1SxP, | 2SxP, | 3SxP, | 4SxP |
| DC input voltage | 6.00VDC, | 12.00VDC, | 15.00VDC, | 19.00VDC |
| Power supply wattage @ 4.00A max input current | $\geq 30.00W,$ | $\geq 48.00W,$ | $\geq 64.00W,$ | $\geq 80.00W$ |
| Power supply wattage @ 8.00A max input current | $\geq 60.00W,$ | $\geq 96.00W,$ | $\geq 128.00W,$ | $\geq 160.00W$ |

RRC-PMM240

| Regulatory Approvals | |
|----------------------|--|
| International | IEC 60601-1(ed.3), IEC 60601-1(ed.3) am1 |
| USA | ANSI/AAMI ES60601-1:2005/(R)2012 |
| Canada | CAN/CSA-C22.2 NO. 60601-1:14 |

| Mechanical Details | |
|--------------------------|---|
| Board dimensions (LxWxH) | 60.00mm x 50.00mm x 11.00mm, without cables and connectors |
| Weight | Typical 22g |
| Connectors | DC input & DC output (2 pin) User interface (6 pin) Battery connector (5 pin smart battery connector) |

To facilitate a fast design-in process for developers, RRC is providing 3D data of the power management module RRC-PMM240 and the battery housings of RRC smart battery. For an application note related to the power management module with additional details contact your RRC representative. For further information on the RRC smart batteries please refer to the RRC website (www.rrc-ps.com).

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