

RRC-PMM35

Power Management Module for integration into all applications using the RRC3570

P/N: 110297





Picture only for reference

CB (E K FC RU O

The PMM35 enables internal charging of batteries and facilitates a seamless switch between mains and battery power, ensuring uninterrupted operation and reliable power backup in a space-saving design. Multiple PMMs can be used in parallel inside one device to combine more batteries.

Features & Benefits

- Easy to design in
 - Easily integrable into slot design
 - Integrated 90° battery connector for different connection options
 - Maximum flexibility: Various mounting options
 - Small footprint & slim design to not waste space within the application
- Plug & Play available embedded charging solution for RRC3570
 - Time to market: no development time, immediate product availability
 - No NRE: no additional development, approvals, or design costs
 - Low total cost of ownership
- Power management functionality
 - Seamless switch between mains and battery power
 - Up to 180W charging power in power supply mode
- Fully Compliant with Smart Battery Specification
 - SMBus communication with battery and host
- Worldwide certified for industrial and medical applications
- Configurable
 - Programmable limits for input current, charging current and charging voltage
 - Status signal can directly drive a LED



Characteristics

| Input (Power Supply Output | |
|----------------------------|-------------------|
| Input voltage range | 19.00V - 24.00VDC |
| Input power | 480.00W max. |
| Input current | 20.00A max. |
| Protection | Short current |

| Application Output | |
|--------------------|---|
| Total output power | 504.00W max. in battery mode 480.00W max. in power supply mode |
| Output current | 20.00A max. |

Power Management

Automatic power source selection with seamless transition between ext. DC power supply and battery

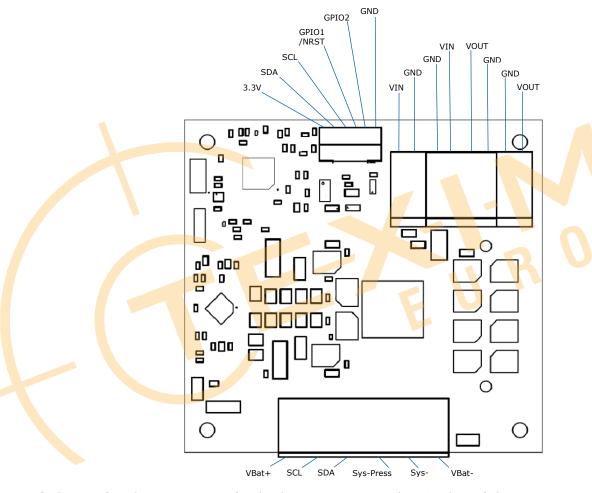
| Battery Input / Output | |
|---------------------------|---|
| Battery charge voltage | Up to 29.40V |
| Battery charge current | Up to 6.00A |
| Battery charge power | Up to 180.00W |
| Battery discharge current | 20.00A cont. |
| Protection | Battery short circuit, over temperature, over voltage, over current |
| Standby current | 0.0015A |

| Environmental Condition | | | | | |
|---------------------------------|---------------------------------|--|--|--|--|
| Operating Temperature | -20° to 60°C | | | | |
| Transport & Storage Temperature | -20° to 60°C | | | | |
| Relative Humidity | 5% - 95% non-condensing | | | | |
| Altitude | 5000m for operation and storage | | | | |



| Regulatory Approvals | |
|----------------------|------------------------------|
| International | СВ |
| Europe | CE, UKCA (EMC) |
| USA | FCC (EMC), UR acc. UL60601-1 |
| Environmental | RoHS |
| | REACH |
| | WEEE |

| Mechanical Details | |
|--------------------------|--|
| Board dimensions (LxWxH) | ~80mm x 75mm, without cables and connectors With 4 mounting holes |
| Battery Connector | 1x battery pack accessible via 90° mating connector for RRC35xx batteries |
| Input/Output Connector | 1x 90° / 8pin (2pin+4pin+2pin) JST S2P-VH and JST S4P-VH style header on PCBA, 3.96mm pitch, 10A(AWG#16) per pin |
| Communication Interface | 180° / 6pin JST S6B-PH style header on PCBA with 2xSMBus lines, 3.3V (<3mA), GND and 2xGPIO, 2mm pitch |



To facilitate a fast design-in process for developers, RRC is providing 3D data of the power management module RRC-PMM35 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).

| Germany/HQ | USA | Hong Kong | China | Vietnam |
|--------------------------|--------------------------|-----------------------------------|--------------------------------------|-------------------------------------|
| RRC power solutions GmbH | RRC power solutions Inc. | RRC power solutions Ltd. | RRC power solutions Ltd. | RRC Power Solutions Company Ltd. |
| Technologiepark 1 | 18340 Yorba Linda Blvd., | S-V,6/F, Valiant Industrial | Room 1306, C Building, | |
| 66424 Homburg / Saar | # 107-437 | Centre 2-12 | Tianan International | Block C, Lot CN4 |
| | Yorba Linda, CA 92886 | Au Pui Wan Street | Building, Renmin South | Dinh Vu – Cat Hai |
| | • | Fo Tan, N.T., Hong Kong | Road, Luohu District, | Economic Zone, |
| +49 6841 98090 | | | Shenzhen 518021 | Dong Hai 2 Ward |
| sales@rrc-ps.com | +1 714 777 3604 | | | Hai An District 180000 |
| | usa@rrc-ps.com | +852 2376 0106 hkrrc@rrc-ps.cn | +86 755 8374 1908 hkrrc@rrc-ps.cn | Hai Phong City |
| | | • | · | vietnam@rrc-ps.com |

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Texim Europe B.V. its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Texim"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Texim makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product.

It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.



Texim Europe - contact details



Headquarters & Warehouse

Elektrostraat 17 NL-7483 PG Haaksbergen The Netherlands

T: +31 (0)53 573 33 33 E: info@texim-europe.com Homepage: www.texim-europe.com









The Netherlands

Elektrostraat 17 NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33 E: nl@texim-europe.com



Belgium

Zuiderlaan 14, box 10 B-1731 Zellik

T: +32 (0)2 462 01 00 E: belgium@texim-europe.com



UK & Ireland

St Mary's House, Church Lane Carlton Le Moorland Lincoln LN5 9HS

T: +44 (0)1522 789 555 E: uk@texim-europe.com



Germany - North

Bahnhofstrasse 92 D-25451 Quickborn

T: +49 (0)4106 627 07-0 E: germany@texim-europe.com



Germany - South

Martin-Kollar-Strasse 9 D-81829 München

T: +49 (0)89 436 086-0 E: muenchen@texim-europe.com



Austria

Warwitzstrasse 9 A-5020 Salzburg

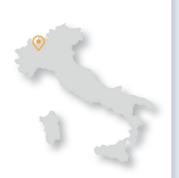
T: +43 (0)662 216 026 E: austria@texim-europe.com



Nordic

Stockholmsgade 45 2100 Copenhagen

T: +45 88 20 26 30 E: nordic@texim-europe.com



Italy

Via Matteotti 43 IT-20864 Agrate Brianza (MB)

T: +39 (0)39 9713293 E: italy@texim-europe.com