

## Features

- DC/DC Power Module
- 15W to 40W with 4:1 inputs, 60W with 2:1
- Screw Terminal Connections
- Class B EMC Filter built-in
- Input Fuse
- Reverse Polarity Protected
- Inrush Current Limiting (Soft Start)
- Output Trim Potentiometer
- Output LED Indicator
- DIN Rail Mounting or Panel Mount Options

### Description

The Recom Power Module takes a standard 15W-60W converter and mounts it on a PCB with screw terminals, an EMC filter, input protection circuitry and a built-in heatsink to offer a complete power module that can be mounted on a bulkhead or on a standard DIN rail. The Power Module is primarily designed for transport applications such as a GPS vehicle tracking power supply or a radio communications power supply, but will also find many uses in industrial, communications or battery-powered applications.

How to use this datasheet:

1. Select the converter that suits your application from the converter series list below
  2. Decide on DIN Mount (RPMD) or bulkhead (RPM) version
- Ordering example: 40W, 18-75 VDC in, single 12V out, DIN Mount = RPMD40-4812SGW

### Selection Guide Single and Dual Outputs - Panel Mount Version

| Power Module Part Number (Bulkhead Version) | Input Range VDC | Output Power Watts | Internal Fuse (Replaceable) | Converter Series |
|---------------------------------------------|-----------------|--------------------|-----------------------------|------------------|
| RPM15-24xxS_DFW**                           | 9.5-36          | 15                 | T4A                         | RP15-24xxS_DFW   |
| RPM15-48xxS_DFW**                           | 18-75           | 15                 | T4A                         | RP15-48xxS_DFW   |
| RPM20-24xxS_DFW**                           | 9.5-36          | 20                 | T4A                         | RP20-24xxS_DFW   |
| RPM20-48xxS_DFW**                           | 18-75           | 20                 | T4A                         | RP20-48xxS_DFW   |
| RPM30-24xxS_DEW**                           | 10-40           | 30                 | T6A                         | RP30-24xxS_DEW   |
| RPM30-48xxS_DEW**                           | 18-75           | 30                 | T4A                         | RP30-48xxS_DGW   |
| RPM40-48xxS_DGW**                           | 18-75           | 40                 | T4A                         | RP40-48xxS_DGW   |
| RPM60-24xxSG**                              | 18-36           | 60                 | T8A                         | RP60-24xxSG      |
| RPM60-48xxSG**                              | 36-75           | 60                 | T4A                         | RP60-48xxSG      |

\*\* add /P or /N for Positive or Negative CTRL logic

### Selection Guide Single and Dual Outputs - DIN Rail Version

| Power Module Part Number (DIN rail Version) | Input Range VDC | Output Power Watts | Internal Fuse (Replaceable) | Converter Series |
|---------------------------------------------|-----------------|--------------------|-----------------------------|------------------|
| RPMD15-24xxS_DFW**                          | 9.5-36          | 15                 | T4A                         | RP15-24xxS_DFW   |
| RPMD15-48xxS_DFW**                          | 18-75           | 15                 | T4A                         | RP15-48xxS_DFW   |
| RPMD20-24xxS_DFW**                          | 9.5-36          | 20                 | T4A                         | RP20-24xxS_DFW   |
| RPMD20-48xxS_DFW**                          | 18-75           | 20                 | T4A                         | RP20-48xxS_DFW   |
| RPMD30-24xxS_DEW**                          | 10-40           | 30                 | T6A                         | RP30-24xxS_DEW   |
| RPMD30-48xxS_DEW**                          | 18-75           | 30                 | T4A                         | RP30-48xxS_DEW   |
| RPMD40-24xxS_DGW**                          | 9.5-36          | 40                 | T4A                         | RP40-24xxS_DGW   |
| RPMD40-48xxS_DGW**                          | 18-75           | 40                 | T4A                         | RP40-48xxS_DGW   |
| RPMD60-24xxSG**                             | 18-36           | 60                 | T8A                         | RP60-24xxSG      |
| RPMD60-48xxSG**                             | 36-75           | 60                 | T4A                         | RP60-48xxSG      |

\*\* add /P or /N for Positive or Negative CTRL logic

xx = Output Voltage Options      Single Outputs: 3.3S = 3.3V      05S = 5V      12S = 12V      15S = 15V  
Dual Outputs: 12D = ±12V      15D = ±15V

Refer to converter series datasheets for detailed information.

## POWERLINE

### DC/DC-Converter Power Module

with 3 year Warranty

# RECOM

## 15-60 Watt

## Single

## & Dual

## Outputs

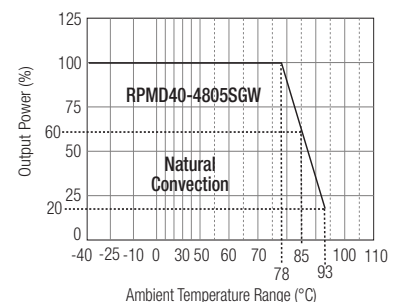


**EN-60950-1 Certified**  
**CE Marked**

## Power Modules

## Derating-Graph (Ambient Temperature)

DIN Rail Version



Derating graphs are valid only for the shown part numbers. If you need detailed derating information about a part-number not shown here please contact our technical support service at [info@recom-development.at](mailto:info@recom-development.at)

**Please Read Application Notes**

**Selection Guide** Triple Outputs - Panel Mount Version

| Power Module Part Number<br>(Bulkhead Version) | Input Range VDC | Output Power Watts | Internal Fuse (Replaceable) | Converter Series |
|------------------------------------------------|-----------------|--------------------|-----------------------------|------------------|
| RPM40-120512TG**                               | 9.5-18          | 40                 | T4A                         | RP40-120512TG    |
| RPM40-120515TG**                               | 9.5-18          | 40                 | T4A                         | RP40-120515TG    |
| RPM40-240512TG**                               | 18-36           | 40                 | T4A                         | RP40-240512TG    |
| RPM40-240515TG**                               | 18-36           | 40                 | T4A                         | RP40-240515TG    |
| RPM40-480512TG**                               | 36-75           | 40                 | T4A                         | RP40-480512TG    |
| RPM40-480515TG**                               | 36-75           | 40                 | T4A                         | RP40-480515TG    |

**Selection Guide** Triple Outputs - DIN Rail Version

| Power Module Part Number<br>(DIN rail Version) | Input Range VDC | Output Power Watts | Internal Fuse (Replaceable) | Converter Series |
|------------------------------------------------|-----------------|--------------------|-----------------------------|------------------|
| RPMD40-120512TG**                              | 9.5-18          | 40                 | T4A                         | RP40-120512TG    |
| RPMD40-120515TG**                              | 9.5-18          | 40                 | T4A                         | RP40-120515TG    |
| RPMD40-240512TG**                              | 18-36           | 40                 | T4A                         | RP40-240512TG    |
| RPMD40-240515TG**                              | 18-36           | 40                 | T4A                         | RP40-240515TG    |
| RPMD40-480512TG**                              | 36-75           | 40                 | T4A                         | RP40-480512TG    |
| RPMD40-480515TG**                              | 36-75           | 40                 | T4A                         | RP40-480515TG    |

**Specifications** (typical at nominal input and 25°C unless otherwise noted)

Specifications are as in individual converter datasheets with the following exceptions:

**Bulkhead Version**

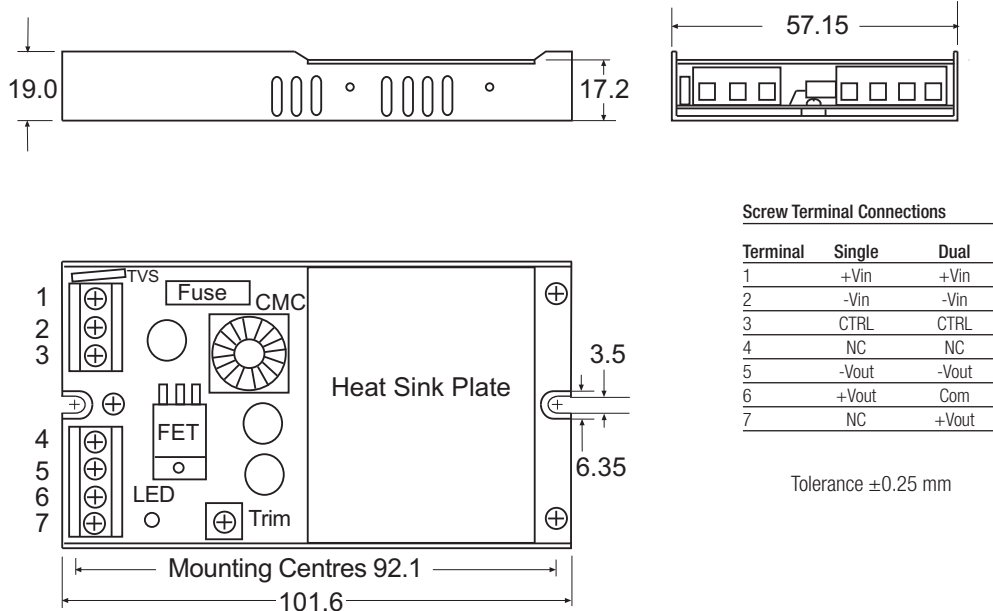
|                     |                                     |                                     |
|---------------------|-------------------------------------|-------------------------------------|
| Input Voltage Range | see selection guide                 |                                     |
| Inrush current      | Nominal Vin and Full Load           | soft start                          |
| Startup time        | Power up: Nominal Vin and Full Load | 100ms typ.                          |
|                     | CTRL pin: Nominal Vin and Full Load | 20ms typ.                           |
| Thermal impedance   | 8.5°C/W                             |                                     |
| Conducted Emissions | EN55022                             | Class B                             |
| Radiated Emissions  | EN55022                             | Class B                             |
| ESD                 | EN61000-4-2                         | Perf. Criteria A                    |
| Radiated Immunity   | EN61000-4-3                         | Perf. Criteria A                    |
| Fast Transient      | EN61000-4-4                         | Perf. Criteria A                    |
| Surge               | EN61000-4-5                         | Perf. Criteria A                    |
| Conducted Immunity  | EN61000-4-6                         | Perf. Criteria A                    |
| Chassis Material    | Aluminium                           |                                     |
| Connectors          | Screw Terminal                      |                                     |
| Weight              | 134g                                |                                     |
| Packing Quantity    | 1 pc.                               |                                     |
| Dimensions          | 101.6 x 57.15 x 19.0mm              |                                     |
| Certifications      | LVD20110124                         | EN-60950-1:2006 + A11:2009 +A1:2010 |

**DIN-Rail Version**

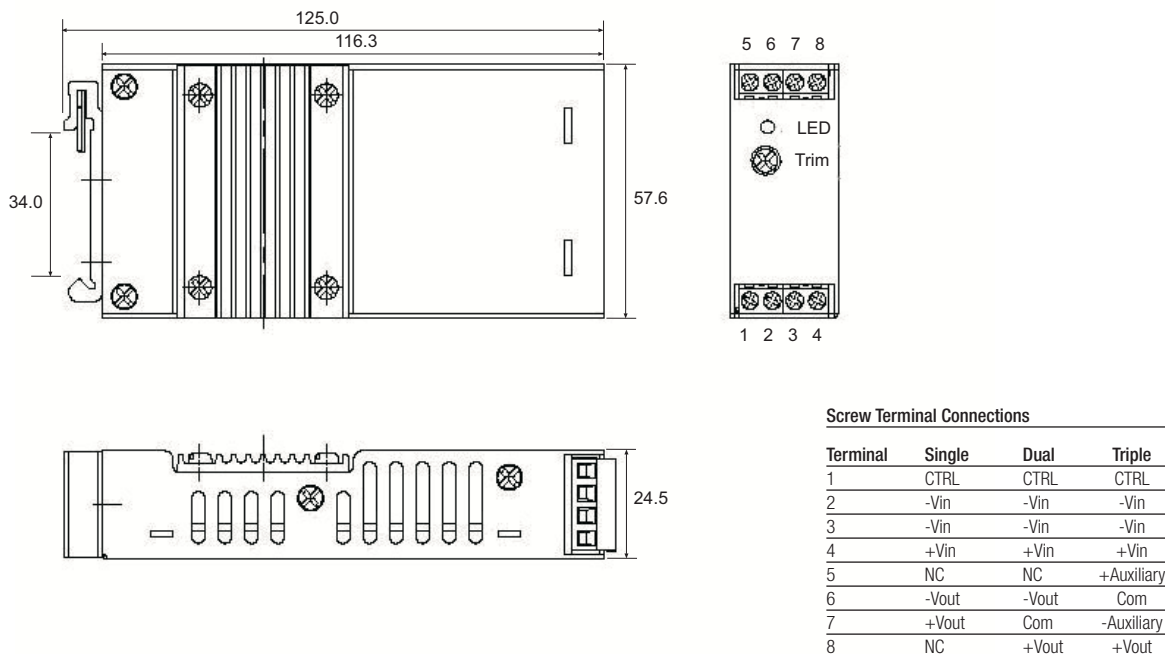
|                     |                                     |                                     |
|---------------------|-------------------------------------|-------------------------------------|
| Input Voltage Range | see selection guide                 |                                     |
| Inrush current      | Nominal Vin and Full Load           | <15A                                |
| Startup time        | Power up: Nominal Vin and Full Load | 100ms typ.                          |
|                     | CTRL pin: Nominal Vin and Full Load | 20ms typ.                           |
| Thermal impedance   | 4.2°C/W                             |                                     |
| Conducted Emissions | EN55022                             | Class B                             |
| Radiated Emissions  | EN55022                             | Class B                             |
| ESD                 | EN61000-4-2                         | Perf. Criteria A                    |
| Radiated Immunity   | EN61000-4-3                         | Perf. Criteria A                    |
| Fast Transient      | EN61000-4-4                         | Perf. Criteria A                    |
| Surge               | EN61000-4-5                         | Perf. Criteria A                    |
| Conducted Immunity  | EN61000-4-6                         | Perf. Criteria A                    |
| Chassis Material    | Aluminium                           |                                     |
| Connectors          | Screw Terminal                      |                                     |
| Weight              | 182g                                |                                     |
| Packing Quantity    | 30 pcs.                             |                                     |
| Dimensions          | 125.0 x 57.6 x 24.5mm               |                                     |
| Certifications      | LVD20110124                         | EN-60950-1:2006 + A11:2009 +A1:2010 |

## Package Style and Connections

### Panel Mount Version



### DIN Rail Version



Tolerance  $\pm 0.5$  mm

# Mouser Electronics

Authorized Distributor

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## RECOM:

[RPM30-1205SE-DIN](#) [RPM30-1212DE-DIN](#) [RPM30-1212SE-DIN](#) [RPM30-1215DE-DIN](#) [RPM30-1215SE-DIN](#)  
[RPM30-123.3SE-DIN](#) [RPM30-2405SE-DIN](#) [RPM30-2405SEW/N-DIN](#) [RPM30-2405SEW-DIN](#) [RPM30-2412DE-DIN](#)  
[RPM30-2412DEW/N-DIN](#) [RPM30-2412DEW-DIN](#) [RPM30-2412SE-DIN](#) [RPM30-2412SEW/N-DIN](#) [RPM30-2412SEW-](#)  
[DIN](#) [RPM30-2415DE-DIN](#) [RPM30-2415DEW/N-DIN](#) [RPM30-2415DEW-DIN](#) [RPM30-2415SE-DIN](#) [RPM30-](#)  
[2415SEW/N-DIN](#) [RPM30-2415SEW-DIN](#) [RPM30-243.3SE-DIN](#) [RPM30-243.3SEW/N-DIN](#) [RPM30-243.3SEW-DIN](#)  
[RPM30-4805SE-DIN](#) [RPM30-4805SEW/N-DIN](#) [RPM30-4805SEW-DIN](#) [RPM30-4812DE-DIN](#) [RPM30-4812DEW/N-](#)  
[DIN](#) [RPM30-4812DEW-DIN](#) [RPM30-4812SE-DIN](#) [RPM30-4812SEW/N-DIN](#) [RPM30-4812SEW-DIN](#) [RPM30-4815DE-](#)  
[DIN](#) [RPM30-4815DEW/N-DIN](#) [RPM30-4815DEW-DIN](#) [RPM30-4815SE-DIN](#) [RPM30-4815SEW/N-DIN](#) [RPM30-](#)  
[4815SEW-DIN](#) [RPM30-483.3SE-DIN](#) [RPM30-483.3SEW/N-DIN](#) [RPM30-483.3SEW-DIN](#) [RPM40-120512TG-DIN](#)  
[RPM40-120515TG-DIN](#) [RPM40-1205SG-DIN](#) [RPM40-1212DG-DIN](#) [RPM40-1212SG-DIN](#) [RPM40-1215DG-DIN](#)  
[RPM40-1215SG-DIN](#) [RPM40-123.3SG-DIN](#) [RPM40-240512TG-DIN](#) [RPM40-240515TG-DIN](#) [RPM40-2405SG-DIN](#)  
[RPM40-2405SGW/N-DIN](#) [RPM40-2405SGW-DIN](#) [RPM40-2412DG-DIN](#) [RPM40-2412DGW/N-DIN](#) [RPM40-2412DGW-](#)  
[DIN](#) [RPM40-2412SG-DIN](#) [RPM40-2412SGW/N-DIN](#) [RPM40-2412SGW-DIN](#) [RPM40-2415DG-DIN](#) [RPM40-](#)  
[2415DGW/N-DIN](#) [RPM40-2415DGW-DIN](#) [RPM40-2415SG-DIN](#) [RPM40-2415SGW/N-DIN](#) [RPM40-2415SGW-DIN](#)  
[RPM40-243.3SG-DIN](#) [RPM40-243.3SGW/N-DIN](#) [RPM40-243.3SGW-DIN](#) [RPM40-480512TG-DIN](#) [RPM40-480515TG-](#)  
[DIN](#) [RPM40-4805SG-DIN](#) [RPM40-4805SGW/N-DIN](#) [RPM40-4805SGW-DIN](#) [RPM40-4812DG-DIN](#) [RPM40-](#)  
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[2405SG/N-DIN](#) [RPM60-2405SG-DIN](#) [RPM60-2412SG/N-DIN](#) [RPM60-2412SG-DIN](#) [RPM60-2415SG/N-DIN](#) [RPM60-](#)  
[2415SG-DIN](#) [RPM60-243.3SG/N-DIN](#) [RPM60-243.3SG-DIN](#) [RPM60-4805SG/N-DIN](#) [RPM60-4805SG-DIN](#)