

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

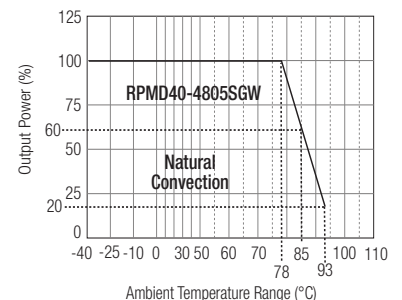


EN-60950-1 Certified CE Marked

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

Please Read Application Notes

Selection Guide Triple Outputs - Panel Mount Version

Power Module Part Number (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 (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

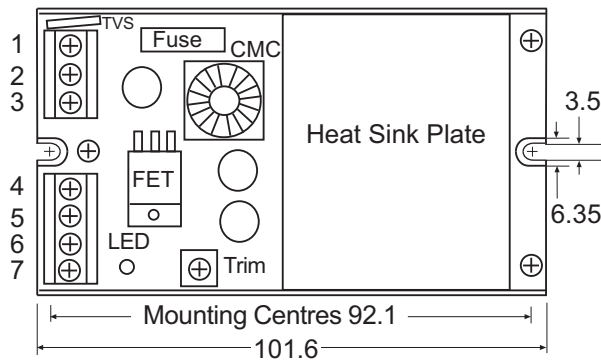
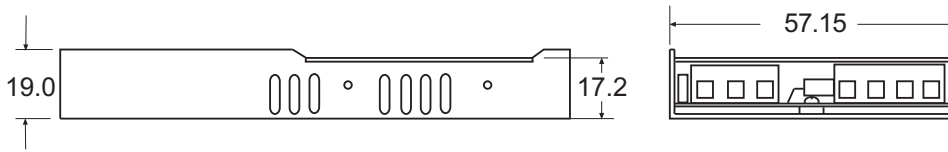
Input Voltage Range		see selection guide
Inrush current	Nominal Vin and Full Load	soft start
Startup time	Power up: Nominal Vin and Full Load CTRL pin: Nominal Vin and Full Load	100ms typ. 20ms typ.
Thermal impedance		8.5°C/W
Conducted Emissions	EN55022	Class B
Radiated Emissions	EN55022	Class B
ESD	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

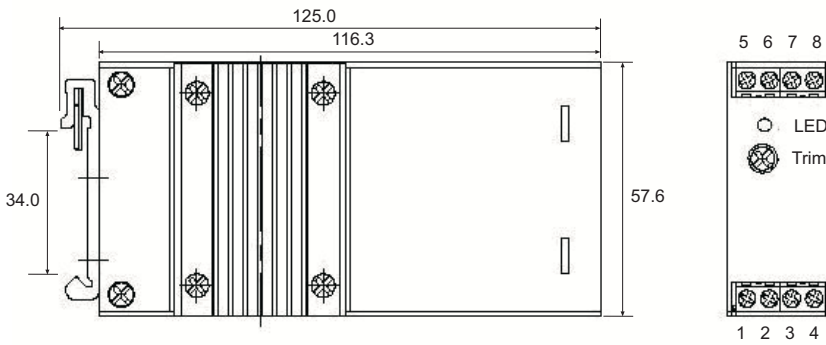


Screw Terminal Connections

Terminal	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	CTRL	CTRL
4	NC	NC
5	-Vout	-Vout
6	+Vout	Com
7	NC	+Vout

Tolerance ± 0.25 mm

DIN Rail Version



Screw Terminal Connections

Terminal	Single	Dual	Triple
1	CTRL	CTRL	CTRL
2	-Vin	-Vin	-Vin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	NC	NC	+Auxiliary
6	-Vout	-Vout	Com
7	+Vout	Com	-Auxiliary
8	NC	+Vout	+Vout

Tolerance ± 0.5 mm