Features

Regulated Converters

- Class B EMC Filter built-in
- Reverse Polarity Protected
- Inrush Current Limiting (Soft Start)
- Output Trim Potentiometer
- Output LED Indicator
- DIN Rail Mounting or Panel Mount Options

RECOM
DC/DC Converter
Power Module

Power Modules

15-60 Watt Single, Dual & Triple Outputs

3 YEAR Warranty

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 12Vout, DIN Mount = RPMD40-4812SGW

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.





Selection Guide Single and Dual Outputs - Panel Mount Version

Power Module Part Number (Bulkhead Version)	Input Range [VDC]	Output Power [W]	Internal Fuse (Replaceable)	Converter Series
RPM15-24xxS_DFW(1,2)	9.5-36	15	T6A	RP15-24xxS_DFW
RPM15-48xxS_DFW(1,2)	18-75	15	T4A	RP15-48xxS_DFW
RPM20-24xxS_DFW(1,2)	9.5-36	20	T6A	RP20-24xxS_DFW
RPM20-48xxS_DFW(1,2)	18-75	20	T4A	RP20-48xxS_DFW
RPM30-12xxS_DE(2)	9.5-18	30	T6A	RP30-12xxS_DE
RPM30-24xxS_DE(2)	18-36	30	T6A	RP30-24xxS_DE
RPM30-24xxS_DEW(1,2)	10-40	30	T6A	RP30-24xxS_DEW
RPM30-48xxS_DE(2)	36-75	30	T4A	RP30-48xxS_DE
RPM30-48xxS_DEW(1,2)	18-75	30	T4A	RP30-48xxS_DEW
RPM40-12xxS_DG(2)	9.5-18	40	T8A	RP40-12xxS_DG
RPM40-24xxS_DG(2)	18-36	40	T8A	RP40-24xxS_DG
RPM40-24xxS_DGW(1,2)	9.5-36	40	T8A	RP40-24xxS_DGW
RPM40-48xxS_DG(2)	36-75	40	T4A	RP40-48xxS_DG
RPM40-48xxS_DGW(1,2)	18-75	40	T4A	RP40-48xxS_DGW
RPM60-24xxSG(1,2)	18-36	60	T8A	RP60-24xxSG
RPM60-48xxSG(1,2)	36-75	60	T4A	RP60-48xxSG

IEC60950-1 Certified
EN60950-1 Certified

Notes:

Note1: add „/N“ for Negative CTRL Logic
Note2: no suffix for Positive CTRL Logic

Power Module Series

Selection Guide Single and Dual Outputs - DIN Rail Version

Power Module Part Number (DIN rail Version)	Input Range [VDC]	Output Power [W]	Internal Fuse (Replaceable)	Converter Series
RPMD15-24xxS_DFW(1,2)	9.5-36	15	T6A	RP15-24xxS_DFW
RPMD15-48xxS_DFW(1,2)	18-75	15	T4A	RP15-48xxS_DFW
RPMD20-24xxS_DFW(1,2)	9.5-36	20	T6A	RP20-24xxS_DFW
RPMD20-48xxS_DFW(1,2)	18-75	20	T4A	RP20-48xxS_DFW
RPMD30-12xxS_DE(2)	9.5-18	30	T6A	RP30-12xxS_DE
RPMD30-24xxS_DE(2)	18-36	30	T6A	RP30-24xxS_DE
RPMD30-48xxS_DE(2)	36-75	30	T4A	RP30-48xxS_DE
RPMD30-24xxS_DEW(1,2)	10-40	30	T6A	RP30-24xxS_DEW
RPMD30-48xxS_DEW(1,2)	18-75	30	T4A	RP30-48xxS_DEW
RPMD40-12xxS_DG(2)	9.5-18	40	T8A	RP40-12xxS_DG
RPMD40-24xxS_DG(2)	18-36	40	T8A	RP40-24xxS_DG
RPMD40-24xxS_DGW(1,2)	9.5-36	40	T8A	RP40-24xxS_DGW
RPMD40-48xxS_DG(2)	36-75	40	T4A	RP40-48xxS_DG
RPMD40-48xxS_DGW(1,2)	18-75	40	T4A	RP40-48xxS_DGW
RPMD60-24xxSG(1,2)	18-36	60	T8A	RP60-24xxSG
RPMD60-48xxSG(1,2)	36-75	60	T4A	RP60-48xxSG

Notes:

Note1: add „/N“ for Negative CTRL Logic
Note2: no suffix for Positive CTRL Logic

Selection Guide Triple Outputs - Panel Mount Version

Power Module Part Number (Bulkhead Version)	Input Range [VDC]	Output Power [W]	Internal Fuse (Replaceable)	Converter Series
RPM40-120512TG(2)	9.5-18	40	T8A	RP40-120512TG
RPM40-120515TG(2)	9.5-18	40	T8A	RP40-120515TG
RPM40-240512TG(2)	18-36	40	T8A	RP40-240512TG
RPM40-240515TG(2)	18-36	40	T8A	RP40-240515TG
RPM40-480512TG(2)	36-75	40	T4A	RP40-480512TG
RPM40-480515TG(2)	36-75	40	T4A	RP40-480515TG

Notes:

Note2: no suffix for Positive CTRL Logic

Selection Guide Triple Outputs - DIN Rail Version

Power Module Part Number (Bulkhead Version)	Input Range [VDC]	Output Power [W]	Internal Fuse (Replaceable)	Converter Series
RPMD40-120512TG(2)	9.5-18	40	T8A	RP40-120512TG
RPMD40-120515TG(2)	9.5-18	40	T8A	RP40-120515TG
RPMD40-240512TG(2)	18-36	40	T8A	RP40-240512TG
RPMD40-240515TG(2)	18-36	40	T8A	RP40-240515TG
RPMD40-480512TG(2)	36-75	40	T4A	RP40-480512TG
RPMD40-480515TG(2)	36-75	40	T4A	RP40-480515TG

Notes:

Note2: no suffix for Positive CTRL Logic

Power Module Series

Specifications measured at Ta = 25°C, nominal input voltage, full load otherwise noted

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

Bulkhead Version

BASIC CHARACTERISTICS

Parameter	Condition	Min.	Typ.	Max.
Inrush current	nominal Vin and full load			soft start
Start-up time	Power up CTRL Pin		100ms 20ms	

ENVIRONMENTAL

Parameter	Condition	Value
Thermal Impedance		8.5°C/Watt

SAFETY AND CERTIFICATIONS

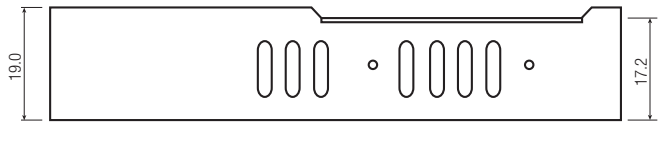
IEC General Safety EN General Safety	LVD20110124	IEC60950-1, 2nd Edition, 2005 + A1:2009 EN60950-1:2006 + A11:2009 +A1:2010;

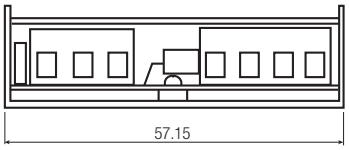
EMC Compliance	Condition	Standard / Criterion
EMI Standard		EN55022, Class B
ESD		EN61000-4-2, Criteria A
Radiated Immunity		EN61000-4-3, Criteria A
Fast Transient		EN61000-4-4, Criteria A
Surge		EN61000-4-5, Criteria A
Conducted Immunity		EN61000-4-6, Criteria A

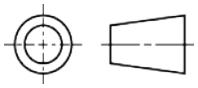
DIMENSIONS and PHYSICAL CHARACTERISTICS

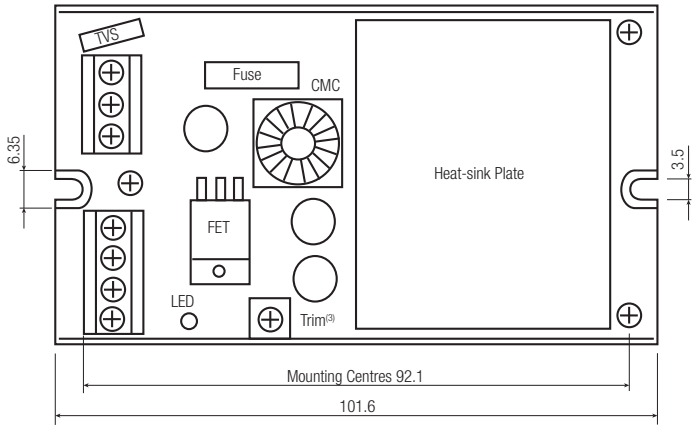
Parameter	Type	Value
Material	Chassis	Aluminium
Package Dimensions (LxWxH)		101.6 x 57.15 x 19.0mm
Package Weight		134g
Connectors		Screw Terminal

Panel Mount Version (mm)









Pin Connections

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

NC: No Connection
Tolerance: X.X ±0.25mm

Notes:

Note3: Trim option depending on converter series, please check datasheet of the converter series

Selection Guide typical at nominal input and 25°C unless otherwise noted

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

PACKAGING INFORMATION		
Parameter	**Type**	**Value**
Packaging Dimensions	Cardboard Box	146 x 75 x 29mm
Packaging Quantity		1pc

DIN-Rail Version

BASIC CHARACTERISTICS				
Parameter	**Condition**	**Min.**	**Typ.**	**Max.**
Inrush current	nominal Vin and full load			15A
Start-up time	Power up CTRL Pin		100ms 20ms	

ENVIRONMENTAL		
Parameter	**Condition**	**Value**
Thermal Impedance		4.2°C/Watt

SAFETY AND CERTIFICATIONS		
IEC General Safety EN General Safety	LVD20110124	IEC60950-1, 2nd Edition, 2005 + A1:2009 EN60950-1:2006 + A11:2009 +A1:2010;
EMC Compliance	**Condition**	**Standard / Criterion**
EMI Standard		EN55022, Class B
ESD Radiated Immunity Fast Transient Surge Conducted Immunity		EN61000-4-2, Criteria A EN61000-4-3, Criteria A EN61000-4-4, Criteria A EN61000-4-5, Criteria A EN61000-4-6, Criteria A

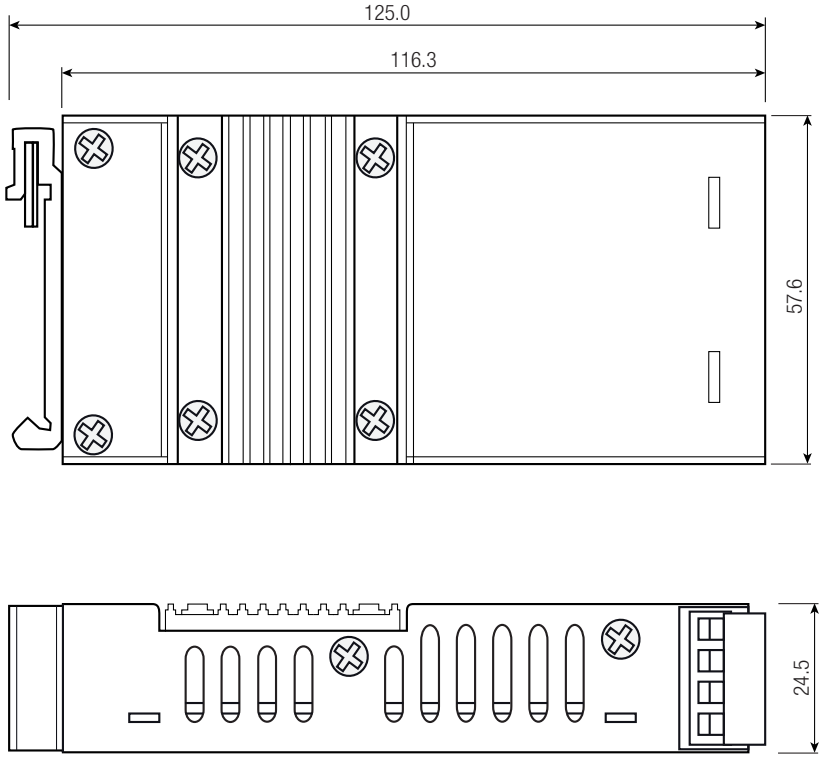
DIMENSIONS and PHYSICAL CHARACTERISTICS		
Parameter	**Type**	**Value**
Material	Chassis	Aluminium
Package Dimensions (LxWxH)		125.0 x 57.6 x 24.5mm
Package Weight		182g
Connectors		Screw Terminal

continued on next page

Power Module Series

Specifications measured at Ta = 25°C, nominal input voltage, full load otherwise noted

DIN Rail Version (mm)





Pin Connections

Pin #	Single	Dual	Triple
1	CTRL	CTRL	CTRL
2	-Vin	-Vin	-Vin
3	-Vin	-Vin	-Vin
4	+Vin	+Vin	+Vin
5	NC	NC	+Aux
6	-Vout	-Vout	Com
7	+Vout	Com	-Aux
8	NC	+Vout	+Vout

NC: No Connection
Tolerance: X.X ±0.5mm

Notes:

Note3: Trim option depending on converter series, please check datasheet of the converter series

PACKAGING INFORMATION		
Parameter	**Type**	**Value**
Packaging Dimensions	Cardboard Box	146 x 75 x 29mm
Packaging Quantity		1pc

The product information and specifications are subject to change without prior notice. RECOM products are not authorized for use in safety-critical applications (such as life support) without RECOM's explicit written consent. A safety-critical application is defined as an application where a failure of a RECOM product may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The buyer shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.