

Installation & User Manual

REG1224-MOD Buck DC-to-DC Converter

INTRODUCTION

This manual covers the installation and operation of the REG1224-MOD DC-DC converter module. This compact unit offers a selectable 12Vdc or 24Vdc output with an input range of 12.3Vdc – 30.0Vdc. Output voltage selection is provided with the use of a simple jumper setting which must be set prior to installation.

The converter module is housed on a small metal bracket, two mounting screws are provided allowing the device to be mounted securely within a suitable enclosure.

FEATURES

- Selectable output voltage (12Vdc or 24Vdc).
- Maximum output current supported is
 - 4A @ 12Vdc
 - 2.5A @ 24Vdc
- Built in thermal shutdown, current limit, and over-voltage protection.
- Excellent line regulation.
- Module comes complete with integrated heatsink/mounting platform.
- Supported ambient temperature operating range is -10C to 50C.

SAFETY INFORMATION



Refer to the enclosed Safety Sheet before installation and first use.

OPERATION AND MONITORING OVERVIEW

Once installed and commissioned no further involvement is required for normal operation. If the output voltage selection is to be changed, then ensure power is removed from the converter module before selecting the desired voltage using the on-board jumper.

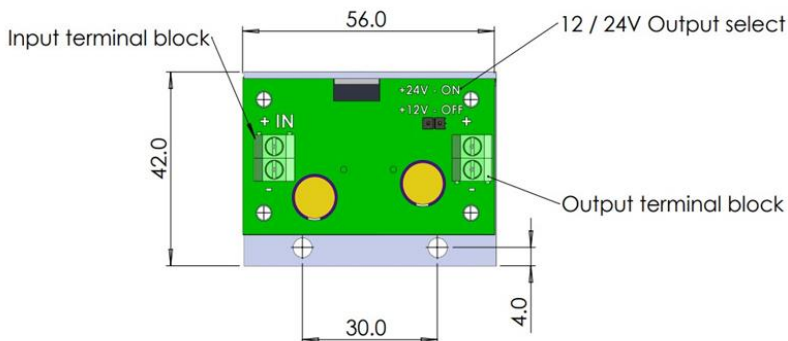
Should any of the built-in protection features trigger due to a fault or a transient, over-temperature or over-voltage, then power off the device for several minutes before re-applying power but only after the fault condition has been rectified.

Once mains power has been restored, power to the load from the converter module will automatically be provided.

If the input voltage drops below the selected output voltage, then the output voltage will track the input voltage down to a minimum of 8.3Vdc.

INSTALLATION AND COMMISSIONING

This unit is only suitable for installation as permanently connected equipment and is to be used with DC appliances only. This equipment must be installed according to all relevant safety regulations.



Converter Module Layout

The module must be supplied from a DC source able to provide sufficient power to drive the load up to the rated limits.

1) Mounting

- Mount the module using the x2 provided mounting holes and suitable M4 screws.
- The module must be fitted so that adequate cooling is provided to the module such as a suitable(metal) substrate which allows heat from the module to be removed effectively.

- 2) Power Up (commissioning)
 - a) Attach correctly rated DC power cable to the module's input terminals and fasten in place using cable ties if necessary.
 - b) Ensure the correct DC output voltage has been selected using the on-board jumper.
 - c) Apply DC power. Check for 12Vdc or 24Vdc (depending on output voltage selected) on output terminals.
 - d) Disconnect DC input power.
- 3) Load Output (commissioning)
 - a) Attach correctly rated DC power cable to the module's output terminals and fasten in place using cable ties if necessary.
 - b) Connect DC output cable to the load.
 - c) Apply DC power. Ensure load device operates correctly.
 - d) Disconnect DC input power to the module.

CONNECTIONS

The figure below shows product connections.

I/P +	Input voltage (Vdc+)
I/P -	Input voltage (Vdc-)
O/P +	Output voltage 12/24Vdc + depending on selection
O/P -	Output voltage 12/24Vdc - depending on selection

SPECIFICATION

Input	
Operational Voltage (Vdc)	12.3 - 30.0Vdc (12Vdc output selected)
	24.3 - 30.0Vdc (24Vdc output selected)
12Vdc Output Specification	
Voltage	12Vdc
Output Load Current (Max continuous)	4A
24Vdc Output Specification	
Voltage	24Vdc
Output Load Current (Max continuous)	2.5A
Environmental	
Temperature - Operating	-10°C to +50°C 90% RH non-Condensing
Temperature - Storage	-20°C to +55°C
Dimensions (w x h x d)	56mm x 30mm x 42mm
Fixing Holes (Dia)	4.2mm
For Indoor Use Only	

MAINTENANCE

This product is intended for use by Service Personnel only. There are NO USER SERVICEABLE parts, and no regular maintenance is required.

END OF LIFE DISPOSAL

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE). At the end of life, the product must be separated from the domestic waste stream and disposed via an appropriate approved WEEE disposal route in accordance with all national and local regulations.

For more information see: www.recyclethis.info

*The packaging supplied with this product may be recycled.
Please dispose of packaging accordingly.*

COMPLIANCE

See web site for current Declaration of Conformity.



Do not dispose of
in unsorted waste

SUPPORT

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