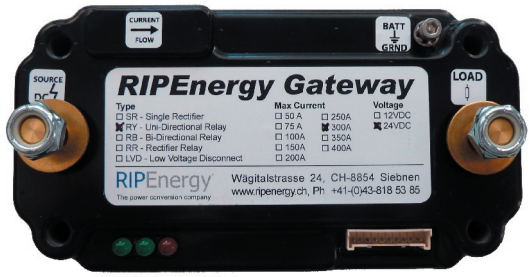
RIPEnergy Gateway RY-Uni-Directional Relay



Benefits

- 99.9% efficiency at max. current
- Fully Encapsulated solid state design
- Light weight
- Dramatically smaller than conventional devices
- Market-leading, ultra-low on-state resistance
- No heat sinks or airflow required
- Quik-turn capability
- Recommended by top battery manufacturers

Applications

Common uses include military, aeronautic, automotive, marine, industrial machinery, photovoltaic, and fleet utility.

The RIPEnergy Gateway is factory programmable to behave as follows:

- Manually triggered relay
- Low Voltage Disconnect (fully autonomous)
- Combination of manual and automatic response
- Precision Circuit Breaker

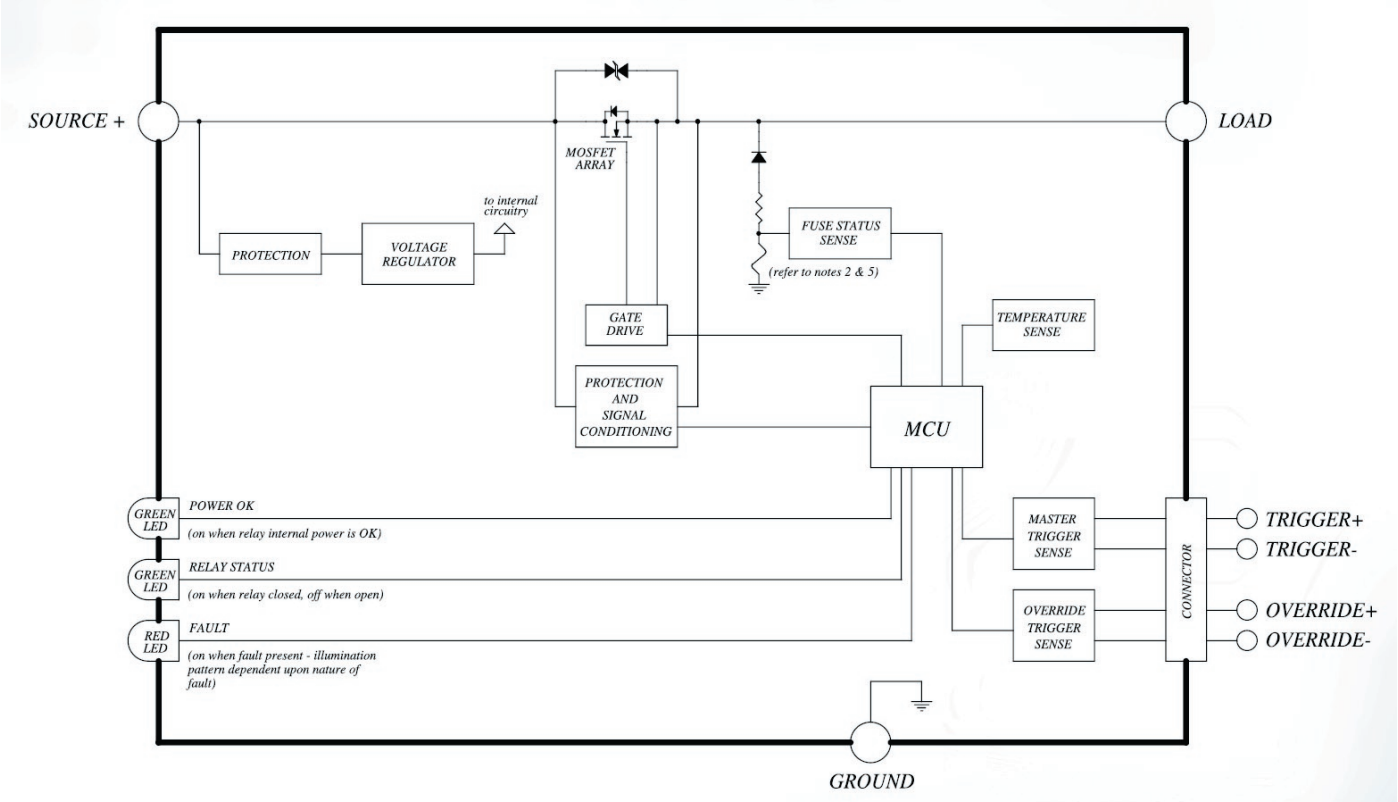
Description

The RIPEnergy Gateway RY-uni-directional relays can be programmed to behave as Voltage Sensitive Relays (VSR) or Low Voltage Disconnects (LVD) and are designed to monitor source (battery) voltage while providing current to a load (accessory) as long as the battery voltage stays above a particular preset level.
An integrated microcontroller is factory programmed to cause the device to open or close by constantly monitoring battery voltage, load current, internal temperature, and timing cues.
It is truly a Perfect Switch capable of responding exactly how the user requires, all in a single high current module capable of handling all high-current and low-current accessories.
The arrayed MOSFET SSR is designed to switch and control DC currents up to 300A.

Features

- Low voltage cutoff
- High voltage cutoff
- Overcurrent protection
- Overtemperature protection
- Timers / programmable Delays
- Manual override trigger
- Manual activation trigger
- Short circuit protection
- Voltage transient self-protection
- Fully autonomous operation
- On-board fault diagnostics
- Automatically disconnects loads preventing battery drain
- Automatically reconnects loads to the battery when a charging source is applied
- Automatically prevents loads from being disconnected from the battery during momentary dips in voltage due to high current draw like engine starting
- Prolongs battery life by preventing deep battery discharge
- Optional Sleep Mode for minimal quiescent current draw
- Easy to install with no external mechanical relays or wiring to fuss with
- Ultra-fast over-voltage response protects sensitive equipment like computers, GPS modules, and computers
- Optional MIL STD 461E

Block Diagram



Quick Specs

Operating Voltage	6.5 to 18 VDC (12V device)
	6.5 to 36 VDC (24V device)
Maximum cont. Load Current	50 to 300 amps DC
Voltage Drop at Max Current	30mV
Trigger Voltage	3.3 to 36 VDC
Trigger Current	2.8mA (12V device)
	4.2mA (24V device)
Operating Current	32.3mA (12V device, trigger at 10VDC)
	33.5mA (24V device, trigger at 10VDC)
Sleepmode Current	650uA (12V device)
	800uA (24V device)
Temperature Range	-40 to +105 °C
Overtemperature Shutdown	135°C
Weight	396 gr
Dimensions	138 x 73 x 40mm
Warranty	1 Year

(Specifications Subject to Change Without Notice)

Available from:

RIPEnergy
The power conversion company

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