CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

LR4

4-Channel Latching-Relay Module

Overview

The LR4 relay module is useful in situations where the power is unreliable or where power needs to be conserved, because it does not need electricity to keep the relay closed. The state of the relay can only be changed by sending a command to the LR4 or by manually toggling the relay button.

Detailed Description

Unlike traditional relays that must be continuously powered to keep their state, the LR4 mechanically latches the relay's state, allowing power to be removed. The only way to change the state of a relay is to send a command to the LR4 or to press the manual toggle button. The data logger sends commands to the LR4 via the SDI-12 protocol or ModBus protocol.

Specifications

Function	Used in situations with unreliable power or where power needs to be conserved.
Number of Channels	4
Supply Voltage	9 to 30 Vdc
Operating Voltage	12 Vdc nominal (9 to 30 Vdc)
Operating Temperature	-40° to +60°C
Relay Type	Latching
Maximum Voltage Ratings of Relays	30 Vdc/30 Vac
Dimensions	17.0 x 3.7 x 6.1 cm (6.7 x 1.5 x 2.4 in.)
Weight	0.48 kg (1.05 lb)

Power Consumption	
Quiescent	< 2.0 mA
Peak	< 250 mA

Communications	
Hardware	SDI-12, RS-232, RS-485
Protocol	SDI-12 Version 1.3, or ModBus via RS-232/RS-485 at 19,200 bps

Digital I/O Input Voltage	
Maximum	+20 Vdc
Minimum	-12 Vdc

Relay Contacts	
Relay #1, Relay #2	Two independent; single pole single throw (SPST)
Relay #3, Relay #4	Two independent; single pole double throw (SPDT)

Maximum Current	
Relay #1, Relay #2	Not to exceed 100 VA or 5 A
Relay #3, Relay #4	Not to exceed 60 VA or 2 A

For comprehensive details, visit: www.campbellsci.com/lr4

CAMPBELL SCIENTIFIC®
Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | www.campbellsci.com
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | INDIA | SOUTH AFRICA | SPAIN | THAILAND | UK | USA