

LR4 4-Channel Latching Relay Module



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The LR4 Four-Channel Latching Relay Module is ideal for locations where power is unreliable or needs to be conserved. 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 datalogger sends commands to the LR4 via the SDI-12 protocol or ModBus protocol.

Features

- Low power consumption
- Relay state is non-volatile
- 4 channels
- LED indicators
- Manual toggle override for each relay
- Compatible with all SDI-12 capable dataloggers

Relay Details

Contacts

Relay #1 and Relay #2

2 independent; single pole single throw (SPST)

Relay #3 and Relay #4

2 independent; single pole double throw (SPDT)

Maximum Voltage Ratings: 30V DC/30V AC

Maximum Current:

Relay #1 and Relay #2 Not to exceed 100V A or 5 A

Relay #3 and Relay #4 Not to exceed 60V A or 2 A

Specifications

Supply Voltage: 9-30VDC

Power Consumption: Quiescent: < 2.0 mA
Peak: < 250 mA

Operating Temperature: -40°C to +60°C

Relay Type: Latching

Communications

Hardware: SDI-12, RS232 or RS485

Protocol: SDI-12 Version 1.3 or MODBUS via RS232/485 at 19,200 bps

Digital I/O Input Voltage

Maximum: +20 Vdc

Minimum: -12 Vdc

Operating Temperature: -40°C to +60°C

Dimensions

Length: 17.0 cm (6.7 in)

Height: 6.1 cm (2.4 in)

Width: 3.7 cm (1.5 in)

Weight: 0.48 kg (1.05 lb)

Ordering Information

Relay Module

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Relay-to-Datalogger Cables

A Standard 3 m cable is included.

CABLE3CBL Three-conductor, 22 AWG cable with drain wire and Santoprene jacket used for SDI-12 communications.

CABLE4CBL Four-conductor, 22 AWG cable with drain wire and Santoprene jacket used for SDI-12 and digital I/O port communications.

CABLE2TP Two-twisted-pair, 22 AWG cable with drain wire and Santoprene jacket used for ModBus communications.

Campbell Scientific products are available from: