



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. The datalogger sends commands to the LR4 via the SDI-12 protocol or ModBus protocol.

Benefits and Features

- › Low power consumption
- › Nonvolatile relay state
- › Manual toggle override for each relay

Ordering Information

Relay Module

LR4 4-Channel Latching Relay Module

Relay-to-Datalogger Cables

The following cables have user-specified lengths; enter the length, in feet, after the -L. A cable termination option must be chosen for these cables.

- CABLE3CBL-L** 3-conductor, 22 AWG cable with drain wire and Santoprene jacket used for SDI-12 communications.
- CABLE4CBL-L** 4-conductor, 22 AWG cable with drain wire and Santoprene jacket used for SDI-12 and digital I/O port communications.
- CABLE2TP-L** 2-twisted-pair, 22 AWG cable with drain wire and Santoprene jacket used for ModBus communications.

Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in a connector for attachment to a prewired enclosure.

Specifications

- › Supply Voltage: 9 to 30 Vdc
- › Operating Temperature: -40° to +60°C
- › Relay Type: Latching
- › Maximum Voltage Ratings of Relays: 30 Vdc/30 Vac
- › 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)

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)

Relay Contacts

- › Relay #1, Relay #2: Not to exceed 100 VA or 5 A
- › Relay #3, Relay #4: Not to exceed 60 VA or 2 A

