

COMMUNICATION CONVERTER



TRP-C28

4-channel isolated digital input and 4-channel power relay output RS485 module, Support ASCII and Modbus Protocol.

Specifications

- ◆ Input channel: 4 digital input channels.
- ◆ Input optical isolation: 3750Vrms.
- ◆ Input logical level 0: +1V (max).
- ◆ Input logical level 1: +4.0V ~ +30V.
- ◆ Communication interface: RS485.
- ◆ Communication speed: Baud rate from 1.2Kbps to 115.2Kbps.
- ◆ Input impedance: 3K Ω .
- ◆ Inputs can be used as counter channel: 4.
- ◆ Counter frequency: 100Hz.
- ◆ Output channel: 4 channels power relay outputs.
- ◆ Relay type: 2 Form A (RL1,RL2) , 2 Form C (RL3,RL4).
- ◆ Contact rating: 5A/30V DC , 5A/120V AC , 5A/250V AC.
- ◆ Relay surge strength: 4000V.
- ◆ Relay operating time: 3mS.
- ◆ Relay operating life: 2 X 10⁷.
- ◆ Dual watchdog: Hardware reset circuit module and host operating status.
- ◆ Signal LED: Power on, all channels.
- ◆ Connection type: Screw terminal, accepts AWG #12~30 wire.
- ◆ Power supply: Screw terminal, or external DC adaptor.
- ◆ Power consumption: 2.7W.
- ◆ Operating environment: -20 to 65 $^{\circ}$ C .
- ◆ Storage temperature: -20 to 65 $^{\circ}$ C .
- ◆ Humidity: 10-90% Non-condensing.
- ◆ Dimension: 151mm X 75mm X 26mm.
- ◆ Weight: 400g.

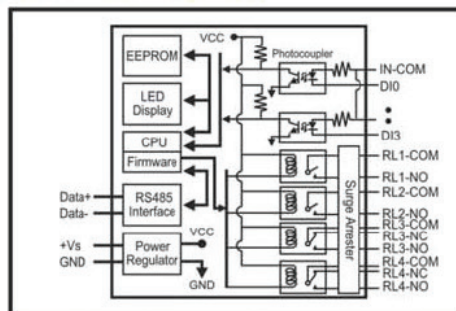
Introduction

TRP-C28 provides with 4 optical isolated digital input channels and 4 power relay outputs. All channels feature screw terminals for convenient connection of field signals as well as LED's to indicate channel status. Inputs channels are equipped with 3750Vrms DC isolation, and surge protection on RS485 data lines that protect the module and devices against high power voltage input and ground potential differences. For easy user access, TRP-C28 can enter configuration mode and self-test mode with outer dip-switch. TRP-C28 supports both ASCII and Modbus protocol, with a full set of command, dual watch-dog, and auto reset function the module can be bi-directionally remote controlled by PC in ASCII or Modbus RTU protocol.

Features

- ◆ Wide input range DC power supply.
- ◆ Support ASCII and Modbus RTU protocol.
- ◆ Supports baud rate from 1.2Kbps to 115.2Kbps.
- ◆ Digital output signal with 3750Vrms isolated protection.
- ◆ Dual watchdog : module's firmware, host computer traffic.
- ◆ LED for each channels working status.
- ◆ DIN rail and panel mount support.
- ◆ Configured and self-test by outer dip-switch.
- ◆ Support screw terminal and external DC power adaptor.

Block Diagram



Application Note

