FR-2054T
8-Channel Digital Output and 8-Channel Digital Input Module

FR-2054T

Introduction

The FR-2054T has 8-channel isolated Sink/Source input and 8-channel isolated sink output. The FR-2000 I/O module has an FRnet interface. The users can daisy chain several FR-2000 modules together. Via FRnet, the FR-200 modules can extend the remote I/O control of PC, PAC and PLC easily. Further information about the networking of FR-2054T; refer to literature related to i-7188EF, i-8172/i-8172W, FRB-100/200/200U.

Features

- Built-in Wire-saving FRnet DI/DO control
- High-speed transmission reliability
- Simple synchronization mechanism
- No software overhead on protocol processing
- Supporting broadcasting (1:n data transmission)
- Duplicating output easily
- Fixed I/O scan-time and I/O synchronization
- DIN-Rail mountable

Specifications

Digital Output	
Output Channel	8
Output Type	Sink, Open-Collector (NPN)
Load Voltage	30VDC, Max
Load Current	250mA, Max
Isolation Voltage	3750Vrms
Digital Input	
Input Channel	8 (Sink/Source)
Input Type	Isolation, One Common for All Digital Inputs
On Voltage Level	+19V ~ 30V
Off Voltage Level	+11V max
Input Impedance	3.3K Ohms
Isolation Voltage	3750Vrms
Interface	
2-wire cabling	CPEV 0.9 (2P twisted-pair cable), When different cables are used, the transmission distance may change
Transfer distance	Max. 400m for speed 250Kbps Max. 100m for speed 1Mbps(Default)
LED Indicators	Power, Communication Run, Communication Error, Terminal resistor, Digital output
Transfer speed	250Kbps and 1Mbps(Default)
Cyclic scan time	2.88ms for speed 250Kbps 0.72ms for speed 1Mbps(Default)
Connection	Removable 20-pin Terminal Block
Power	
Input Voltage Range	+10 ~ +30VDC (Non-isolation)
Power consumption	2W Max
Protection	Power reverse polarity protection
Frame Ground for EMS Protection	Yes
Connection	5-Pin Removable Terminal Block
Mechanical	
Case	Plastic
Flammability	UL 94V-0 materials

Dimensions	33mm x 110mm x 102 mm (W x H x D)
Installation	DIN-Rail

Environment

Operating Temperature	-25 °C~ +75°C
Storage Temperature	-30 ~ +85°C
Ambient Relative Humidity	10% to 90% non-condensing

Ordering Information

FR-2054T	8-channel isolated digital output and 8-channel isolated digital input module