



FR-2053TA/FR-2053HTA

16-Channel Isolated Sink/Source Digital Input Module

FR-2053TA/FR-2053HTA

Introduction

The FR-2053TA/FR-2053HTA has 16-channel isolated Sink/Source input, while the FR-2057TA has 16-channel isolated source 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-2000 modules can extend the remote I/O control of PC, PAC and PLC easily. Further information about the networking of FR-2053TA/2057TA; refer to literature related to I-7188EF, I-8172W, FRB-100/200U.

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 Input	
Input Channel	16 (Sink/Source)
Input Type	Isolation, One Common for All Digital Inputs
On Voltage Level	+3.5 ~ +30 VDC
Off Voltage Level	+1 VDC Max.
Input Impedance	3 kOhm
Isolation Voltage	3750 Vrms
Interface	
2-wire cabling	2-wire cabling Belden 9841 (2P twisted-pair cable), When different cables are used, the transmission distance may change
Transfer distance	Max. 400m for FR-2053TA Max. 100m for FR-2053HTA
LED Indicators	Power, Communication Run, Communication Error, Terminal resistor, Digital input
Transfer speed	250 kbps for FR-2053TA 1 Mbps for FR-2053HTA
Cyclic scan time	2.88ms for FR-2053TA 0.72ms for FR-2053HTA
Connection	Removable 20-pin Terminal Block
Power	
Input Voltage Range	+10 ~ +30 VDC (Non-isolation)
Power consumption	2.4 W Max.
Protection	Power reverse polarity protection
Frame Ground for EMS Protection	Yes
Connection	5-Pin Removable Terminal Block
Mechanical	
Casing	Plastic (Flammability UL 94V-0)
Dimensions (W x L x H)	33 mm x 102 mm x 110 mm
Installation	DIN-Rail
Mechanical	
Operating Temperature	-25°C ~ +75°C
Storage Temperature	-30°C ~ +85°C
Ambient Relative Humidity	10% ~ 90% RH, non-condensing

Ordering information

FR-2053TA	16-channel isolated sink/source input module
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