# FR-2057iT

## 16-channel Sink Type Isolated Output Module With Isolated Communication line

**FR-2057iT**

## Introduction

The FR-2053iT has 16-channel isolated Sink/Source input, while the FR-2057iT has 16-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-2000 modules can extend the remote I/O control of PC, PAC and PLC easily. Further information about the networking of FR-2053iT/2057iT; refer to literature related to I-7188EF, 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 | 16 |
| Output Type | Sink, Open-Collector (NPN) |
| Load Voltage | +5V to 30VDC |
| Load Current | 100mA, Max |
| Isolation Voltage | 3750Vrms |
| Connection | 20-Pin Removable Terminal Block |
| **Interface** | |
| Isolation Voltage | 3000Vrms |
| 2-wire cabling | Belden 8941 (2P twisted-pair cable), When different cables are used, the transmission distance may change |
| Transfer distance | Max. 400m for speed 250K Max. 100m for speed 1M(Default) |
| LED Indicators | Power, Communication Run, Communication Error, Terminal resistor, Digital output |
| Transfer speed | 250Kbps and 1Mbps(Default) DIP Switch Settings |
| Cyclic scan time | 2.88ms for speed 250K 0.72ms for speed 1M(Default) |
| **Power** | |
| Input Voltage Range | +10 ~ +30VDC (Non-isolation) |
| Power consumption | 2.4W Max |
| Connection | 5-Pin Removable Terminal Block |
| **EMS Protection** | |
| ESD | 4KV for power liner, Communication line and each channel |
| EFT | 1KV for power liner |
| Surge | 0.5KV for power liner |
| **Mechanical** | |
| Case | Plastic |
| Flammability | UL 94V-0 materials |
| Dimensions | 32.5mm x 110mm x 102mm (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

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|---|---|
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