FRnet Products

FRB-200/100

FRnet Communication Board



FRB-200



FRB-100

Functional Description

PC-based I/O control systems are widely used in measurement and control system applications. But sometimes it is very difficult to meet the demands of critical timing control missions. As a result of the special features of FRnet, such as real I/O synchronization and fixed scan time, FRB boards can be added to PC-based systems to give additionial PLC-like control functions, with no need to mix PC-based controlers with PLCs. The FRB-200/100 is an isolated FRnet communication board. The FRB-100 has a single FRnet port, while the FRB-200 has two FRnet ports. Each FRnet port can control a maximum of 16 communication nodes, numbered from 0 to 15. Each single node of the remote I/O module can control a maximum of 16 DI/DO channels. In other words, each FRnet port can control a maximum of 128 DI and 128 DO channels. Traditional high-channel I/O cards occupy several PC slots, such as the ICPDAS PIO-D144 or DIO-144, and the bulky cables can be difficult to handle. Several FRB boards can be combined to work together to control thousands of I/O channels. Reduced cabling, lower labor costs, easy installation and higher reliability are the major advantages of an FRnet solution.

Applications

- Industrial Automation
- Remote I/O control
- Building Automation
- Parking Lot Management

Specifications

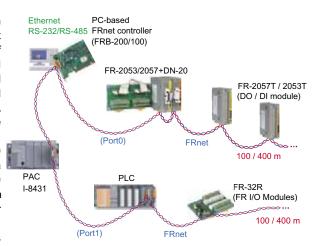
- Communication speed: 250Kbps
- Cyclic Scan time:
 - 128 input/128 output points@2.88 ms
- Communication distance: 400m max
- Wire cable: (shielded) Twisted-pair cable

General Specifications

- Power consumption: 5V DC @ 250mA(max)
- Operating temperature: -25°C ~ +75°C
- Operating humidity: 10% ~ 90% RH, non-condensing
- Storage temperature: -30°C ~ +85°C
- Storage humidity: 5% ~ 95% RH, non-condensing
- Dimensions: 120 mm x 90 mm

Features

- Reduced Wiring two-wire cabling
- Innovative token-stream communication technology
- Real-time I/O synchronization capabilities
- Fixed cyclic scan time for deterministic control
- High speed distributed I/O control capabilities
- Memory-mapping I/O programming
- Easily programmable
- No software overhead for protocol processing
- 5V DC PCI-bus add-on card



Pin Assignment



Ordering Information

Standard

FRB-100 : 2-port FRnet communication board FRB-100 : 1-port FRnet communication board

Related products

FR-2053: 16-channel isolated digital input module with 20-pin header

FR-2053T: 16-channel isolated digital input module with 20-pin terminal block

FR-2053S:16-channel isolated digital input module **FR-2057**: 16-channel isolated digital output module with 20-pin header

FR-2057T: 16-channel isolated digital output module with 20-pin terminal block

FR-2057S: 16-channel isolated digital output module