



FRB-100U

FRB-200U

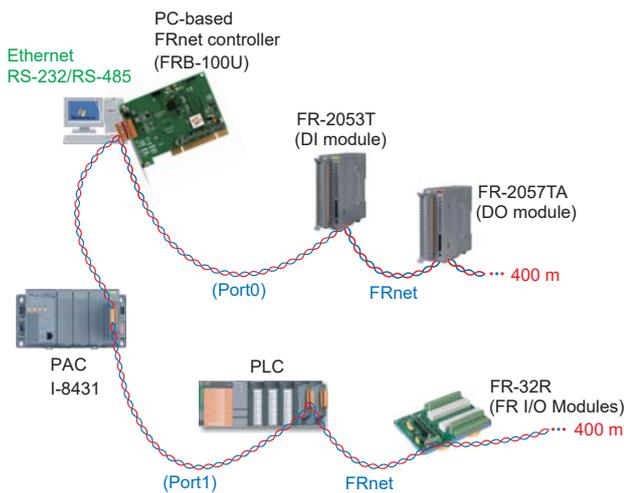
Isolated FRnet Communication Board

Introduction

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 additional PLC-like control functions, with no need to mix PC-based controllers with PLCs. The FRB-200U supports 5V and 3.3V PCI bus and fully compatible with the FRB-100/200.

Traditional high-channel-count I/O cards occupy several PC slots, 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.

The FRB-100U/200U is an isolated FRnet communication board. The FRB-100U has a single FRnet port, while the FRB-200U 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 (8 DI and 8 DO) channels. In other words, each FRnet port can control a maximum of 256 DI/DO (128 DI and 128 DO) channels.



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
- FRB-100U/200U: Universal PCI card, supports both 5V and 3.3V PCI bus.



Applications

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

Software

Drivers

- 32-bit Windows XP/2003/2008/7/8/10
- 64-bit Windows XP/2003/2008/7/8/10

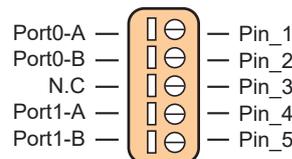
Sample Programs

- 64-bit Windows XP/2003/2008/7/8/10
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET

Hardware Specifications

Models	FRB-100U	FRB-200U
Interface		
Bus Type	3.3 V/5 V Universal PCI, 32-bit, 33 MHz	
FRnet Ports	1	2
Transfer Speed	250 kbps	
Transfer Distance	400 m Max.	
Cyclic Scan Time	128 input/128 output points@2.88 ms	
Wire Cable	(shielded) Twisted-pair cable	
Power		
Consumption	5 VDC @ 250 mA (Max.)	
Mechanical		
Dimensions (W x L x D)	120 mm x 90 mm x 22 mm	
Environmental		
Operating Temperature	0 °C ~ +55 °C	
Storage Temperature	-20 °C ~ +65 °C	
Humidity	0 ~ 90% RH, non-condensing	

Pin Assignments



Ordering Information

FRB-100U	1-channel Isolated FRnet Communication Board (Universal PCI Bus)
FRB-200U	2-channel Isolated FRnet Communication Board (Universal PCI Bus)