

Protocol/interface converter series

- E1 to 10Base-T Protocol Converter
- 4E1 to 10/100Mbps Ethernet Protocol Converter
- 8E1 to 10/100Mbps Ethernet Protocol Converter
- E1 to V.35 Protocol Converter
- Protocol Converter Chassis

E1 to 10Base-T Protocol Converter

E1 support Both 75ohm & 120ohm Impedance, unframed & framed mode



Overview

The device F4-51 Network Bridge is a high performance, remote, self-learning Ethernet bridge. Its compact size and low cost make it ideal for cost-sensitive bridging applications, or as a LAN extender over bit stream type infrastructures. Its E1 data interface also provides an economical digital access solution for E1 and

Fractional E1 network Services, which can work at data rates of 64Kbps to 2048Kbps. User data is placed into the E1 frame, using only the required number of timeslots. Timeslot assignment is accomplished according to the Data Port speed and manual setting of DIP switches. The main E1 link may be clocked from the recovered receive clock or from an internal oscillator. For easy to check the fault of network line, the device provides loop selection, both local loop and remote loop.

Features



- High performance bridge for 10Base-T Ethernet extension
- Fully compatible with IEEE 802.3 and Ethernet Standards
- E1 channel: both framed & unframed are OK, both 75 & 120ohm are OK
- Ethernet Port: 10Mbps, Full/Half Duplex Mode compatible
- Ethernet ports support MDI/MDI-X selectable
- Allow transmitting and receiving VLAN data packet
- 15000 frames per second filtering and forwarding rate
- 1000 MAC address LAN table, and automatic LAN table learning and aging.
- Standalone and Module optional
- Power of Chassis: 2 Slots for slide in power supplier module, AC or DC power supplier module, Redundant Power supported
- AC220V+-20%or DC-48V power input

Specifications

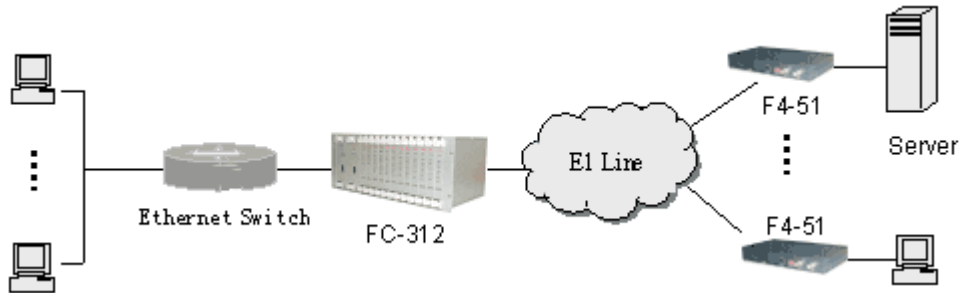
- LAN port
Standard: Conforms to IEEE802.3 / 10Base-T Ethernet
Data rate: 10Mbps(20Mbps/10Base-T in Full duplex topology)
Compatible on Full/Half duplex topology
Connectors: RJ-45 Connector
Transfer distance: <150m
- E1 port
Standard: ITU G.703, G.704,
Jitter Performance: According to ITU G.823
Bit rate: N*64Kbps, N=1~31 (Fractional Mode) or 2.048Mbps(Full Mode)
Line Code: HDB3
Line Impedance: 75/120ohms optional
Pulse Amplitude: Nominal 2.37V+-10%

General

- Voltage: AC 220V+-20%or DC -48V

- Power Consumption: <3 Watts
- Temperature: 0-50oC
- Humidity: 0-90%(non-condensing)
- Size: (Width: from left to right)
Standalone: 272mm(Width)*139mm(Deep)*41mm(High)
Chassis: 438mm(Width)*252mm*Deep)*178mm(High)

Typical Application



Order Information

F4-51A E1 to 10Base-T Protocol Converter, standalone, 220VAC power supply

F4-51D E1 to 10Base-T Protocol Converter, standalone, -48VDC power supply

F4-51M E1 to 10Base-T Protocol Converter, Module

4E1 to 10/100Mbps Ethernet Protocol Converter

E1 support Both 75ohm & 120ohm Impedance, unframed

Overview

F5-4513 is the most newly promoted product that can convert 1-4E1 to 10Base-T Ethernet, and vice versa. This protocol converter could support 1-4E1 to Ethernet, which extend the bandwidth to 7.68Mbps. It is widely used in two LAN connecting, remotemonitor and video broadcasting.



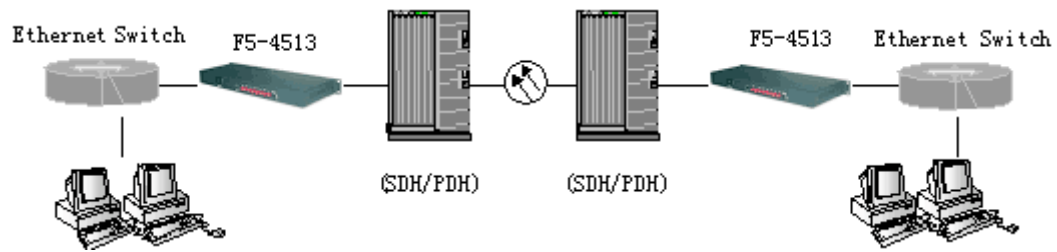
Features

- Fully compatible with IEEE802.3, ITU-T G703, G704 and G823
- Support 10Base-T, 100Base-TX protocol
- Support VLAN & IEEE802.1q packets
- Enable any group of CH1-CH4 E1 channel to transmit the data at will
- Extend the bandwidth to 7.68Mbps when using 4E1 channels
- Support auto-inspection of effective E1 channel without interruption of data transfer.
- Automatically cut off the E1Channel when it has LOS and AIS alarm, and inform the remote end simultaneously
- Support remote E1 Loop function
- 75/120 ohm Optional of E1 channel impedance
- Internal power supply, overall power consumption<3w, AC160V-260V or DC -48V optional

Specification

- E1 Port
 - Bit rate: 2.048Mb
 - Line code: HDB3
 - Standard: in accordance with ITU-T G.703, G.704
 - Connector: BNC connector, line impedance 75ohm
 - Number of E1: 4
 - Jitter Performance: compatible with G.742 and G.82
- Ethernet Port
 - Data Rate: 10/100Mbps
 - Standard: Compatible with IEEE802.3
 - Connector: RJ45
 - Number of Ports:1 port
 - Auto-negotiation with half/full duplex
- Dimension: 440mm(W) *160mm(D)*44mm(H)

Application



Order Information

F5-4513A 4E1 to 10/100Mbps Ethernet Protocol Converter, standalone, 220VAC power supply

F5-4513D 4E1 to 10/100Mbps Ethernet Protocol Converter, standalone, -48VDC power supply

F5-4513M 4E1 to 10/100Mbps Ethernet Protocol Converter, Module

8E1 to 10/100Mbps Ethernet Protocol Converter

E1 support Both 75ohm & 120ohm Impedance, unframed

Overview

F5-4511 Series F5-8513 Converter is the most newly promoted product that can convert 1-8E1 to 100Base-TX or 10Base-T Ethernet, and vice versa. This protocol converter can extend the bandwidth to 16.384Mbps. It not only provide completed indicators to show the status and alarm messages of the E1 line and Ethernet port, but also support BER Stat. of E1 and flow Stat. of Ethernet port. It is widely used in two LAN connecting, remote monitor and video broadcasting



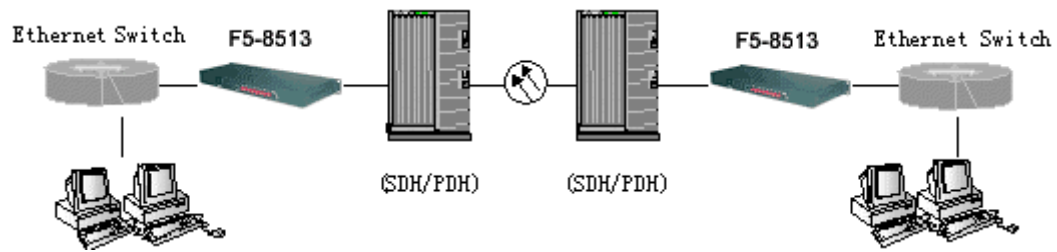
Features

- Compatible with ITU-T G703, G704 and G823
- Support 10Base-T, 100Base-TX protocol
- 1024 pieces of MAC address list and with address filter function
- Enable any group of CH1-CH8 E1 channel to transmit the data at will
- Extend the bandwidth to 16.384Mbps when using 4E1 channels
- Support auto-inspection of effective E1 channel without interruption of data transfer.
- Automatically cut off the E1Channel when it has LOS and AIS alarm, and inform the remote end simultaneously.
- Support remote E1 Loop function
- 75ohm unbalanced E1 channel impedance
- RS232 port for management, one software can manage up to 256 pieces of device
- Internal power supply, AC160V-260V or DC -48V optional

Specification

- E1 Port
 - Bit rate: 2.048Mb
 - Line code: HDB3
 - Standard: in accordance with ITU-T G.703, G.704
 - Connector: BNC connector, line impedance 75ohm
 - Number of E1: 4
 - Jitter Performance: compatible with G.742 and G.82
- Ethernet Port
 - Data Rate: 10/100Mbps
 - Standard: Compatible with IEEE802.3
 - Connector: RJ45
 - Number of Ports:1 port
 - Auto-negotiation with half/full duplex
- Dimension: 440mm(W) *160mm(D)*44mm(H)

Application



Order Information

F5-8513A 8E1 to 10/100Mbps Ethernet Protocol Converter, standalone, 220VAC power supply

F5-8513D 8E1 to 10/100Mbps Ethernet Protocol Converter, standalone, -48VDC power supply

E1 to V.35 Protocol Converter

E1 support Both 75ohm & 120ohm Impedance, unframed & framed mode



Overview

E1 to V.35 protocol converter can realize the bi-directional data transfer from E1 port to V.35. This equipment is widely used in communication network including WAN and LAN, realizing the transfer from E1 channel of SDH or PDH equipment to V.35 which maybe provided with router.

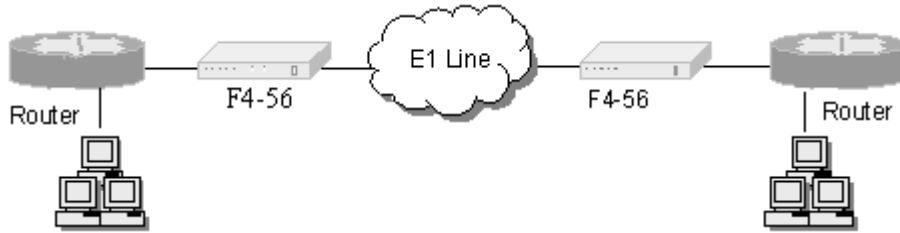
Feature

- E1 channel: both framed & unframed are OK, both 75 & 120ohm are OK
- Standard: G.703, line code: HDB3
- Alarm system for E1 loss
- Support local/remote loop test
- DB25 connector for V.35, in DCE mode
- Multiple clock selection: internal clock, V.35 line clock and E1 recovery clock
- Panel instruction for easy understanding of equipment working status
- Internal power supply, 220V AC and -48V DC optional
- Standalone and module at your selection

Specification

- E1 port
 - Bit rate: 2.048Mbit/s+-50ppm
 - Line code: HDB3
 - Standard: Compatible with ITU-T G703
 - Connector: BNC connector with line impedance 75ohm, RJ45 connector with line impedance 120ohm
 - Jitter performance: in full compatible with G742 and G823
- V.35 port
 - Line code: NRZ
 - Bit rate: 2.048 Mbit/s+-50ppm
 - Connector: DB25female, with DB25/M34 transfer line
 - Way of Connection: DCE
 - Clock: Line Clock, Local clock
- General
 - Operating temperature: 0-50jæ
 - Power Supply: -48VDC or 220VAC+-20%
 - Dimension: 170mm(W)*133mm(D)*40mm(H)

Application



Order Information

F4-56A E1 to V.35 Protocol Converter, standalone, 220VAC power supply

F4-56D E1 to V.35 Protocol Converter, standalone, -48VDC power supply

F4-56M E1 to V.35 Protocol Converter, Module

Protocol Converter Chassis

4U height, 12 slots, 2 slide-in power supply modules

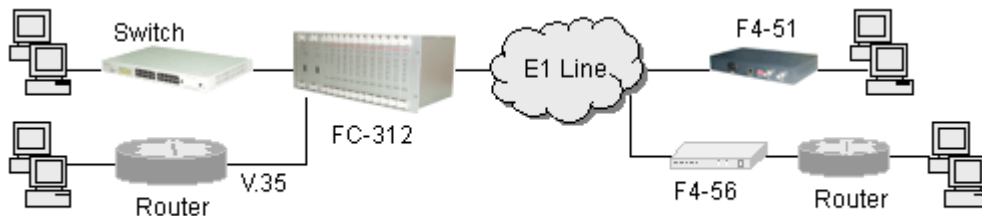
Overview

Fibrige protocol converter chassis can install up to 12 protocol converter modules. It is compatible with E1 to 10Base-T module and E1 to V.35 module. It has 2 slide-in switch power module, enhance its reliability. The chassis is widely used in star-topology ethernet inter connect.

Main Features

- 4U height, up to 12 slots
- 2 slide-in power supply support redundant backup
- Compatible with E1 to 10Base-T module and E1 to V.35 module
- Each module can support hot-swap plug
- Support RS232 management

Typical Application



Order Information

FC-312 12-slot Protocol Converter Chassis, none console management

FC-412 12-slot Protocol Converter Chassis, with console management

FP-4060A 60W 220VAC Power Supply Module for FC-412

FP-4060D 60W -48VDC Power Supply Module for FC-412