FE1-ETH Interface Converter

Fast Ethernet over E1 Protocol Convertor

FE1-ETH

❯ **Wire-speed packet forwarding**
❯ **Support 9.6k bytes frames**
❯ **Support HDLC/GFP encapsulation**
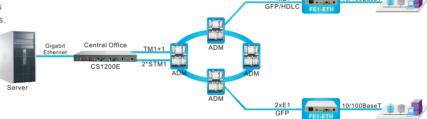❯ **Support E1 frame or un-frame application**

Overview

FE1-ETH is Fast Ethernet over E1 protocol converter. Ethernet traffic over E1 lines is transferred to the packet-switched network via the unit's Fast Ethernet ports. Packets are forwarded from the Ethernet network to the TDM network at wirespeed, fully utilizing the expensive TDM circuit bandwidth. The encapsulation method support HDLC/GFP-F(G.8040).

Typical Applications

The device can be used in a point-to-point application or in a hub-and-spoke topology, operating opposite Grancom's CS1200 series, MRS46xx series and third-party gateways.

Typical applications include:

● Ethernet private Line/LAN services

● IP DSLAM, cellular IP, and WiMAX base station backhauling

● Interoffice or enterprise LAN connection.

Specifications

E1 Interface
● Number of Ports: 1
● Interface Standard: G.703 G.704
● Line Impedance and Connector
  120 Ω, balanced, RJ-45
  75Ω, unbalanced, BNC
● Data Rate and Line Code: 2.048 Mb/s , HDB3
● Line Protection:
  15 KV ESD protection
● System Clock: Internal or loopback

Ethernet Interface
● Number of Ports: 1
● Type: 10/100 Mbps, auto-negotiation, full/half duplex, flow control, MDI/MDX crossover
● Compliance: Relevant sections of IEEE 802.3
● Max Frame Size : 9.6k bytes
● Connector and Electrical Cable Type: RJ-45 , Cat.5
● Line Protection:
  Built-in 1.5 KV Magnetic Isolation Protection

Encapsulation Protocols
● HDLC (compatible with RAD or RAISECOM's products)
● GFP-F(ITU-T G.8040, G.7041/Y.1303)

Management Ports
● Console Port
  Interface standard: RS-232
  Connector: RJ-45
  Data rate: 115.2 kbps

Physical Characteristics
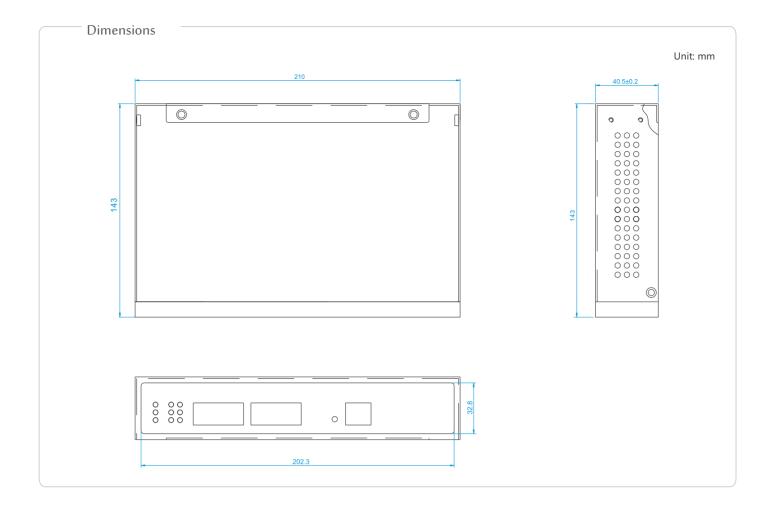● Housing: Metal
● Weight: 1.0kg
● Dimensions: 210 x 142 x 41mm

Environmental Limits
● Operating Temperature: 0 to 50°C
● Storage Temperature: -40 to 70°C
● Ambient Relative Humidity: 10 to 95% (non-condensing)

Power Requirements
● Input Voltage:
  AC:100-240VAC(±10%),50/60Hz
  DC:-48VDC(36-72VDC)
● Power Consumption: <5 watts

Dimensions

Unit: mm

210

143

40.5±0.2

143

32.8

202.3

Ordering Information

Standard Type	Function Description
FE1-ETH	Fast Ethernet over E1 Protocol Convertor