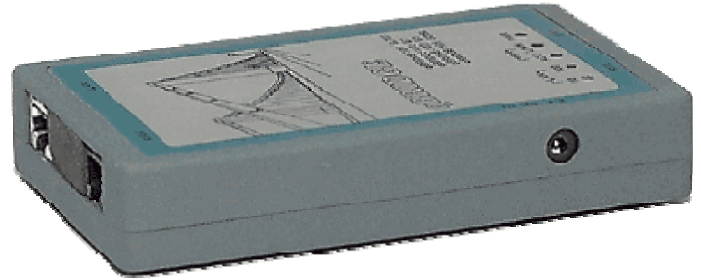


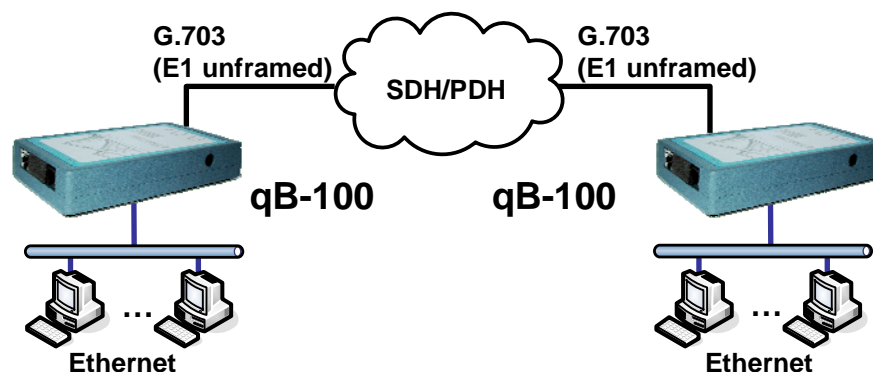
qBRIDGE-100 is a low cost reliable and high performance converter/bridge that can be used for connection of remote segments of 10/100Base-TX Ethernet networks over standard G.703 (E1 unframed) channels (SDH or PDH network). qBRIDGE-100 enables connection of two LANs through a unframed G.703 stream with fixed 2048 Kbps throughput. Embedded ASIC-based hardware bridge offers very high reliability and performance. ASIC-based architecture allows eliminating performance problem (especially when there is a large amount of short Ethernet frames to transfer over G.703 interface). Peak device performance is 90000 frames per second that is more than enough for any type Ethernet traffic processing.



The converter is also useful for connecting remote LAN segments through two pair (4 wire) copper line with maximum reach up to 2 km (24 AWG cable).

“Bridge connection” mode converter is transparent for Ethernet frames with VLAN tag and for VPN packets. It has one Ethernet 10/100Base-TX port with Auto-Negotiation and Auto-MDIX capability and one G.703 2048 Kbps port. User can easily configure qBRIDGE-100 with no additional equipment (terminal emulation program and so on). DIP-switches are used to control all qBRIDGE-100 functions. The device has selectable frame buffer configuration, configurable LAN Filtering mode, IEEE 802.3x flow control. Additional feature of qBRIDGE-100 is Link-Loss forwarding i.e. capability to switch off Ethernet port in case of G.703 interface failure. This feature is user to report G.703 failure to equipment connected to qBRIDGE-100 from Ethernet side. For G.703 interface it is also possible to setup transmit clock source (internal or recovered). For diagnostic purposes and troubleshooting qBRIDGE-100 provides remote loopback mode and LED indicators.

The product is available with external AC or DC power adapter as a standalone unit in compact small-size plastic case.



Technical Specifications

Ethernet: "Bridge connection" mode

- IEEE 802.1d transparent learning bridge
- MAC Table: 256 MAC address
- IEEE 802.1q VLAN pass-through
- Filtering and Forwarding: 90000 pps
- Frame Buffer: 340 frames

G.703 Interface (E1 Unframed)

- Interface: ITU-T G.703; One G.703 port
- Data rate: 2048 Kbps
- HDB3 coding; Impedance: 120 Ohm
- Jitter performance: ITU-T G.823
- Relative receive level: 0 to -43 dB
- Clock modes: Internal or Recovered
- Link-Loss Forwarding
- Remote loopback mode
- Connector: RJ-45

Ethernet Interface

- One Ethernet port 10/100Base-TX
- IEEE 802.3/ 3u/ 3x flow control
- Auto-Negotiation 10/100M; Auto-MDIX
- Half/Full duplex (10/100-20/200Mbps)
- Ethernet to HDLC encapsulation
- Frame length up to 1536 bytes
- Connector: Shielded RJ-45

General

- Configuration: DIP-switches
- Various Diagnostic LED Indicators
- Power supply: 100~240VAC/36~72VDC
- Power consumption: 1.5 W
- Size: 80 x 135 x 27 mm
- Temperature: 0 ÷ 45 °C
- Humidity: 0 ÷ 95% without condensation