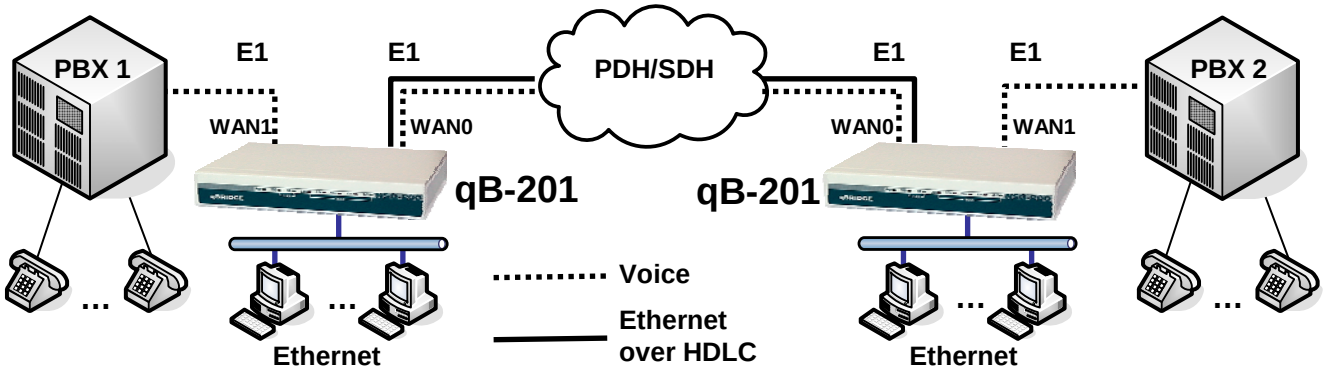
qBRIDGE-201 is a dual E1 access unit with an opportunity of allocation of a part of E1 bandwidth (timeslots) for Ethernet traffic. The device has one 10/100Base-TX Ethernet port and two E1 ports. It can be used in a standard mode of interface converter (like qBRIDGE-101 with redundant E1 port) as well as "Drop-Insert" (Add-Drop) Multiplexer that can insert Ethernet traffic into user-selected timeslots and transfer transparently unused timeslots between E1 ports. Device operation is controlled by DIP-switches so no terminal is needed. E1 ports meet all requirements of ITU-T recommendations G.703, G.704, G.706, and G.732.

In mode of interface converter qBRIDGE-201 can be used to connect remote LAN segments over standard E1 channels. The converter supports all functions of the qBRIDGE-101 but has a possibility to switch to redundant E1 port in case of primary E1 port failure. Device has Link-Loss forwarding function i.e. Ethernet port disabling in case of E1 failure.

A “Drop-Insert” Multiplexer is used to replace data in selected timeslots of secondary E1 port incoming stream by HDLC encapsulated data from Ethernet port and output concatenated E1 stream to primary E1 port. At the same time it splits data received from primary E1 port to Ethernet port and secondary E1 port. Timeslots used for Ethernet traffic transport in primary E1 port are filled with selectable Idle Code in output secondary E1 port data stream. User can select any desired combination of E1 timeslots for Ethernet traffic transfer.

Special relay module can be installed into qBRIDGE-201 to provide transparent bypass data transfer between E1 ports to keep integrity of E1 link in case of power failure.

The product is available with AC or DC power supply as a standalone unit in iron enclosures.



Technical Specifications

Ethernet: "Bridge connection" mode
· 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

E1 Interface Framed/ Unframed
· Interface: ITU-T G.703; Two E1 ports
· Data rate: 64-2048 Kbps
· HDB3 coding; Impedance: 120 Ohm
· Jitter performance: ITU–T G.823
· Relative receive level: 0 to -43 dB
· Clock modes: Internal or Recovered
· ITU-T G.704, CRC4, CAS
· Link-Loss Forwarding
· Remote loopback mode
· Automatic alarm generation
· Connectors: 2xRJ-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: 3 W
· Size: 182 x 140 x 30 mm (metal case)
· Weight : 0,6 Kg
· Temperature: 0 ÷ 45 ºC
· Humidity: 0 ÷ 95% without condensation