

CV 200 TTX

ETHERNET BRIDGE OVER E1/T1 – G-704 INTERFACE



Characteristics & Benefits

E1 2.048 Mbps and
T1 1.544 Mbps

Network interface : ba-
lanced 100/120 Ohm
RJ45 and unbalanced
75 Ohm BNC

Ethernet 10/100 BaseT,
automatic rate

E1 : G703, G704 at
2,048 MBPS +/- 50 ppm
T1 : G704, DSX-1 and
CSU Line Build Out, D4
and ESF framing

Based on up to date
technologies for clock
recovery, jitter, band-
width allocation

Flexible timeslot alloca-
tion

Rate: Nx64 or Nx56
kbps

E1 or T1 network mode
selectable by the user

ETHERNET BRIDGE AND E1/T1 G704 CONVERTER

The **CV-200** is a manageable 10 / 100 Base-T Ethernet bridge that connects to a G704 network termination in E1 – 2,048 Mbps or T1 – 1,544 Mbps.

The **CV-200** is a must component of E1/T1 network to interconnect Ethernet Local Area Networks.

The **CV-200** fits in a compact metallic enclosure with a choice of 230 Vac or 110 Vac mains power supply, or 48 Vdc or 12-36 Vdc DC/DC converter to satisfy most industrial and Telco's requirements.

The **CV-200** embeds a T1 and E1 network interface. It can easily be deployed in international applications and be set by the user for European E1 or USA T1 network access.

The **CV-200** includes a powerful Ethernet bridge. It will suit most network interconnection needs thanks to its Ethernet frame filtering, compression algorithm, VLAN and other protocol transparency features.

The **CV-200** encapsulates Ethernet frames over HDLC or PPP-BCP protocol which makes it compatible with most other equipments. It supports double VLAN tagging (Q-in-Q).

The **CV-200** is very easy to operate, especially thanks to its Windows graphical software offered with the equipment. The **CV-200** can also be managed from the local area network with the IP protocols : Telnet, SNMP, FTP. Management traffic can be isolated through a dedicated VLAN.

The **CV-200** installation is very flexible. It can be mounted on a DIN rail with an optional kit. Two units may also be installed in a 19 inch bay.

The **MX-200-TTX** is also part of this range of products. It is a Drop and Insert multiplexer with an Ethernet interface and an RS232 port to connect an asynchronous equipment.

Applications

Interconnecting local corporate networks via an E1 / T1 network



Characteristics & Benefits

Can be used as a short or long range modem (1.6 km)

Filtering Ethernet bridge

100,000 address memory

400 frame buffer
Data compression algorithm

PPP-BCP and HDLC transport

Single and double VLAN tagging, Q-in-Q

Easy to manage : VT100 menus, Windows graphical software

Local and remote Network management : Telnet, FTP, SNMP, TRAP

Compact metallic enclosure, choice of mains power supply and DC/DC converter

48 Vdc or 12-36 Vdc DIN rail kit

19" kit for two units / 1U

The **CV-200** is an efficient and cost effective Ethernet bridge to connect two enterprise LAN's over an E1 or T1 network such as a PDH loop, or a microwave link, or other network with E1/T1 interface, or in a point to point schema. The CV-200 provides all features and rate conversion capability of a complete CSU-DSU, with a E1 and T1 network interface, and both Nx64 and Nx56 K conversion.

The Ethernet bridge provides a lot of advantages such as high performance, protocol transparency, ease of installation and configuration, data compression.

SPECIFICATIONS

E1 Interface

Transparent (G703) or framed mode (G704)
G704 framing : PCM31, PCM31C, PCM30, PCM30C.

Impedance 120 Ohms, RJ45 socket
Impedance 75 on BNC sockets for the network interface

Phase jitter performance : G823

Line code : HDB3

Rate : 2048 Kbps +/- 50 ppm

Long Haul / Short Haul : -16 / -40 dBm

Transmit clock : internal, network, external from the D&I E1 terminal

Insulation : 1500V as per K20 et K21 standards

T1 Interface

Line code : AMI, B8ZS

Line Build Out : DSX-1 and CSU

Framing : D4, ESF

RJ45 socket

G704 : 1 to 24 IT

Timeslot rate : Nx64 or Nx56 KBPS

Phase jitter performance : G823

Rate: 1,544 Kbps +/- 50 ppm

Transmit clock : internal, network, external from the D&I T1 terminal

Impedance : 100 Ohms on a RJ45 socket

Insulation : 1500V as per K20 et K21 standards

Ethernet Interface

Rate : 10 / 100 MBPS

Interface : 10/100 BaseT, IEEE 802.3

Socket : RJ45

Ethernet bridge with automatic MAC address learning : 10,000 MAC address memory

400 Ethernet frame buffer

Filtering of Ethernet frame can be enabled / disabled

Padding bit suppression : enable / disable

Data compression algorithm for rates up to 256 KBPS

Statistics : sent and received frame counters, filtering diagnostics

Bridge : PPP-BCP, HDLC

Provider Bridge : double VLAN tagging (Q-in-Q)

Dedicated VLAN for management and test

Max Ethernet frame size : 2028 bytes.

Time slot Allocation

Timeslot extraction from the network interface to the Ethernet port

User defined allocation, no restriction

Nx56KBPS or Nx64KBPS

Configuration Port

RS232, V24/V28, RJ45 socket, 8 bits, 19.2 Kbps
VT 100 menus, AT commands

LED Indicators

Power / management in progress

Test

Link : LAN is connected

LAN RX : data received from the LAN

LAN TX : data sent to the LAN

WAN CD : signal received on the WAN E1/T1 port

WAN SYNC : E1/T1 network is synchronized

Management

Local management through the console port : AT commands, VT 100 menus

Windows graphical software MX-CFG : edit and save configuration on the PC, supervision, test control, firmware upgrade

Diagnostics : network test loop, PING

TCP-IP management : Telnet, SNMP, FTP for configuration and firmware file transfer

Remote control through TCP-IP protocols

Statistics over 24 hours : counters for Loss Of

Synchronization, loss of carrier, Errored Seconds, Severely Errored Seconds, UnAvailable Seconds

Power supply

External 230 Vac : CV-200-TTX-MVE

External 110 Vac : CV-200-TTX-MVU

Internal 48 Vdc : CV-200-TTX-MC

Max power consumption : 8 W

Environment

Size : 146.5 x 144 x 30.7mm

Weight : 0.5 kg - Mains power supply: 0.1 kg

Operating temperature : 0-55 °C (32-131 °F)

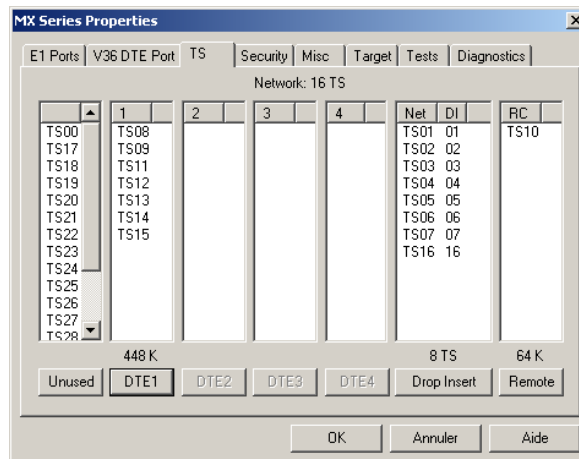
CV-200 has been design to comply with the

following standards :

EEC : EN-60950, EN-50081-1, EN-50082-1

FCC Part-15, Class A.

MTBF : 245.000 h



MXCFG : Windows graphical software to manage the CV and MX range of products

ORDERING INFORMATION

CV200-TTX - [MYZ](#)

Y : Power supply

- V External mains adapter
- C Internal 48 Vdc DC/DC converter

Z : Destination

- E Europe
- U USA

Options

- **DIN-WALL** : wall mounting kit
- **DIN-CPE** : DIN rail mounting kit
- **RACK-DUAL-CPE** : 19" mounting it (2 products)



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