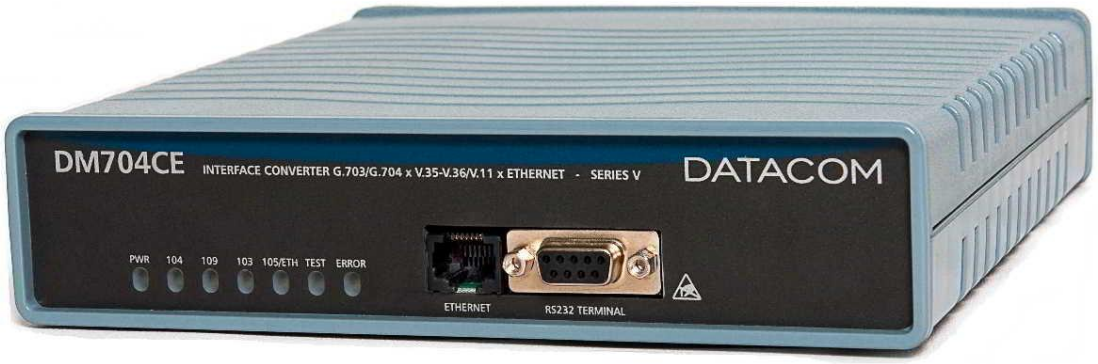

DM704CE Series V

Interface Converter
E1 (G.703/G.704) x Digital (V.35-V.36/V.11) x Ethernet (10/100BaseT)

Product Brief

DM704CE Series V - Interface Converter E1 (G.703/G.704) x Digital (V.35-V.36/V.11)

General Characteristics

DM704CE Series V is an equipment that uses the G.703 interface at 2,048kbit/s, with a frame structure in conformity with G.704, a V.35/V.11 interface or an Ethernet interface with the bridge remote functionality.

The equipment offers three operation modes: E1 to digital interface conversion, Ethernet to E1 interface conversion and also Ethernet to digital interface conversion. Only two interfaces can be used at the same time.

Allows transparent channel operation (not structured by G.704), with digital interface communication at G.703 interface rates (2,048kbit/s).

The cascading feature allows many DM704 to be connected on the same E1 link, allocating different channels for each converter, and thus allowing more than one port over a single E1 link.

Pseudo-controlled carrier that makes the carrier of each converter to depend on the remote CT105.

Offers an Ethernet 10/100BaseT bridge interface with VLAN support.

Local analog link, digital link and digital remote link (V.54) associated through the terminal, per CT140 and CT141 or management.

Standard bit error ratio test (BERT) generator, activated by one of the front panel keys.

LEDs of power supply, CT103, CT104, CT105, CT109, test and BERT error.

Dimensions

- The DM704CE Series V is a desktop modem (195x200x44mm), with 93-250VAC or 36-72VDC automatic power supply.

Management

- Configuration using a terminal or PC computer through a controlling port with V.24/V.28 (RS232) interface, available through the DB9 female connector in the front panel. Also allows users to manage another DM704 converter (series III/IV/V).
- Remote management by E1 interface, which together with the DM705 and DM706C multiplexors or the DM704S/SE (series IV/V) using DATACOM's DMG20 management card, allows users to configure, monitor and activate test links to verify performance and location of link errors..

Synchronism

- Operations with both internal and external clocks (digital interface CT113) or regenerated from the G.703 signal received.
- Automatic commuting to the internal clock in the absence of the regenerated clock.

Specifications

E1 Interface

- Voice and data transference at up to 2048kbit/s in channels of n x 64kbit/s, with 1 ≤ n ≤ 32.
- CRC4 in according to G.704, CAS and indication of frame syncronism local and remote.
- AIS Transmission (Alarm Indication Signal) in E1 line in case of CT108 (DTR) fail in the V.35 or V.36/V.11 interface.
- Allows the Idle byte configuration, when not using cascading.
- Speed of 2.048kbit/s, using HDB3, in according to ITU-T G.703.
- Selectable impedance in the G.703 interface 75ohms (coaxial cable with BNC connector) e 120ohms (twisted pair with RJ48 connector).

Digital Interface

- V.35 or V.36/V.11 interfaces, selectable through straps. Available in DB25 female connector, pinnout in according to ISO2110 Amd. 1 - RS-530 compatible.
- Data Transport at n x 64kbit/s rates, with 1 ≤ n ≤ 32.
- It's possible to use external clock to data reception in the digital interface (CT128).
- It's possible to reverse the transmition clock phase (CT114) of CT103's data.
- It's possible to use CT113 clock to CT103 data reception even when transmission clock selected is internal or regenerated.

Ethernet Interface

- The Ethernet Interface is type 10/100BaseT, in according to IEEE 802.3 and performs the remote bridge function.
- The bridge operates at the Ethernet interface MAC level. This way, the tributary is fully transparent to theupper layer protocols, such as TCP/IP, UDP, etc.
- The bridge local address table is capable of storing up to 1,000 MAC addresses, and if a station is inactivefor over 5 minutes, its address will be removed from the table.
- It has functionalities as autonegotiation, auto cross-over, flow-control and back-pressure, thereby it allows selecting the operation mode between full-duplex and half-duplex and the rate between 100 Mbit/s and 10 Mbit/s.
- When using the Ethernet interface, in remote bridge function, the equipment could always be used with compatible equipment (DM704SE series II / IV / V, DM704CE series II / IV / V, DM991SE series IV / V, DM991CE series IV / V or DM705-Switch).

- It can operates in Pode operar em qualquer taxa múltipla de 64 kbit/s.
- It accepts packets with up to 1552 bytes, supporting VLAN.
- Available in RJ45 connector.