



G.703/V.35/10BASET INTERFACE CONVERTERS

General Description

Interface converter **IC-GBV** is a multifunctional device which makes electrical and protocol conversion between data coming from its three digital interfaces V.35/X.21, G.703 and 10BaseT allowing different input/output configurations. V.35/X.21 interface supports nx64 Kb/s rates, G.703 interface supports transparent and framed (G.704) modes and 10BaseT interface comes with bridge capabilities. All the above features give this product an outstanding versatility and use efficiency for many different applications as follows:

As a V.35/X.21 to G.703 interface converter

Router connection through E1 transport systems (E1 networks or microwave links)

As a G.703 to 10BaseT interface converter

WAN connection through E1 transport systems with local traffic filtering (bridging)

As a V.35/X.21 and 10BaseT multiplexer over G.703

IC-GBV multiplexes data coming from V.35/X.21 and 10BaseT interfaces into a G.704 frame structure. This allows the user to provide different services (LAN, videoconference, routing,...) through an only E1 connection.

Features

- Desktop and rack mount formats
- nx64 Kb/s rates in V.35/X.21 interface.
- Transparent and framed format (G.704) in G.703 interface.
- Bridge capabilities in 10BaseT interface.
- Multiplexing capabilities for data coming from V.35/X.21 and 10BaseT into G.704 frame (only framed modes).
- Manual assignment of G.704 frame time slots mapped on V.35/X.21 and 10BaseT interfaces.
- Leds for monitoring.
- DIP switches for configuration.
- Local and remote loop and PRBS generation/detection activated through push buttons in front panel.
- RS-232 and RS-485 (rack mount versions) Local management.
- Remote management through G.704 framing (only framed modes).
- Integration available into **DAVANView** SNMP Management System.

Specifications

V.35 interface

Rates: 2048 Kb/s \pm 50 ppm y nx64 Kb/s
Circuits: 103,104,105,106,107,108,109,113,114 y 115
Transmission clock: internal, external and slave
Connector: 34 pins rectangular (Winchester) (ISO2593)

X.21 interface

Rates: 2048 Kb/s \pm 50 ppm y nx64 Kb/s
Circuits: T(103), R(104), C(105), I(109), S(114)
Transmission clock: internal
Connector: 15 pins sub-D (ISO4903)

G.703 interface

Frame format:
Transparent (G.703) y framed (G.704)
Formats G.704: PCM31, PCM31C, PCM30, PCM30C
Jitter: as per G.823
Line code: AMI or HDB3
Rates: 2048 Kb/s \pm 50 ppm
Transmission clock: internal, external and slave
Connector: Coaxial o RJ-45
Impedance: 75 ohm or 120 ohm

10BaseT interface

Rate: 10 Mb/s
Interface: 10 BaseT, IEEE 802.3, Normal or Uplink
Connector: RJ45
Hardware bridge capabilities with autolearning of up to 10.000 MAC addresses
Selectable compression for increased efficiency

User's interface

Leds

LINK OK Connection OK on 10BaseT interface
TX LAN Data transmission on 10BaseT interface
RX LAN Data reception on 10BaseT interface
COLL Collision on 10BaseT interface
G.703 Signal detected on G.703 inteface
TEST Device under local or remote loop
ERR CRC error detection or LCV (Line Code Violation) on G.703 interface
V.35 Data transmission on V.35 interface

Push buttons

LL Local analog loop (LAL)
RDL Remote digital loop (RDL)

Management

Diagnostics:

Local (LAL) and remote (RDL) loop

Local Management:

RS-232 / RS-485 interface (9600 8N1)
Connector: RJ-45

Power supply

Internal (Desktop): 230 VAC, (5/12/24/48 VDC optional)
Internal (Rack mount): -48DC from the RC-IC-48 chassis backplane
Power: 4W

Dimensions

Desktop : 180 mm x 40 mm x 150 mm
Rack mount: 5TE x 6U

Temperature

0 ° a 60 °C. (non condensing)

Approvals

CE (EN60950, EN50081-1, EN50082-1)

Versions

IC-GVB-AC G.703, V.35 and 10BaseT interfaces.
Desktop. 90-230 AC power supply
IC-GVB-48 G.703, V.35 and 10BaseT interfaces.
Desktop. -48DC power supply
ICR-GVB G.703, V.35 and 10BaseT interfaces.
Rack mount. -48DC power supply from RC-IC-48 chassis

Accessories

RC-IC-48 19" 6U chassis for up to 15 interface converter cards
PS-AC-IC External power supply for RC-IC-48 chassis. INPUT: 90-230AC OUTPUT: -48DC