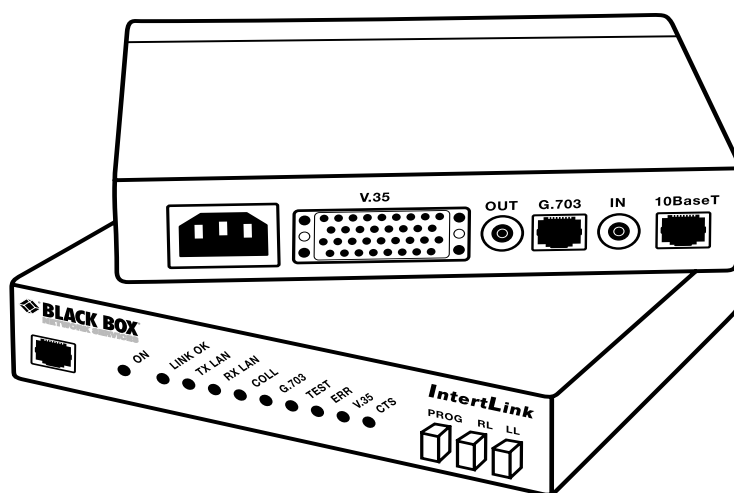# BLACK BOX®
NETWORK SERVICES

G.703 Interface Converter

Key Features

▶ V.35/X.21 - 10Base-T - G.703 interface Converter

▶ V.35/X.21 and 10Base-T multiplexer over G.704

▶ nx64 rates on V.35/X.21 interface

▶ Bridge capabilities on 10Base-T interface

▶ Local and remote SNMP Management

▶ Transparent and framed format (G.704) in G.703 interface

▶ Leds for monitoring

▶ Multiplexing capabilities for data coming from V.35/X.21 and 10Base-T into G.704 frame

▶ Manual assignement of G. 704 frame time slots mapped on V.35/X.21 and 10Base-T interfaces

Interface converter 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 10Base-T 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 10Base-T 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 10Base-T interface converter

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

As a V.35/X.21 and 10Base-T multiplexer over G.703

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

▼

The Complete Package

• Basisunit
• Power and Confuguration Cable
• Manual
• ULM Software

Specifications

V.35 interface — Rates: 2048 Kb/s, 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) M34

X.21 interface —
Rates: 2048 Kb/s, nx64 Kb/s;
Circuits: T(103), R(104), C(105), I(109), S(114);
Transmission clock: internal;
Connector: 15 pins sub-D (ISO4903) desk Top only with an adapter cable: MDSILCAB-X21

G.703 interface — Frame format: Transparent (G.703) and framed (G.704);
Formats G.704: PCM31, PCM31C, PCM30, PCM30C;

Jitter: as per G.823;
Line code: AMI or HDB3;
Rates: 2048 Kb/s ± 50 ppm;
Transmission clock: internal, external and slave;
Connector: Coaxial or RJ-45;
Impedance: 75 ohm or 120 ohm

10Base-T interface — Rate: 10 Mb/s;
Interface: 10 BaseT, IEEE 802.3, normal or Uplink, full or half Duplex
Connector: RJ45;
Hardware bridge capabilities with autolearning of up to 10.000 MAC addresses, Selectable compression for increased efficiency
HDLC Protocol

User's interface — *Leds:*

LINK OK	Connection OK on 10Base-T interface
TX LAN	Data transmission on 10Base-T interface
RX LAN	Data reception on 10Base-T interface
COLL	Collision on 10Base-T interface
G.703	Signal detected on G.703 interface
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)
RL	Remote digital loop (RDL)
PRBS	Random test sequence

Management — *Diagnostics:*
Local (LAL) and remote (RDL) loop
Local Management:
RS-232 / RS-485 interface (9600 8N1)
Connector: RJ-45

Power supply — Internal: 230 VAC, (5/12/24/48 VDC optional);
Power: 4W

Dimensions — 180 x 40 x 150 mm
weight: 900 g.

Temperature — 0 ° a 60 °C. (non condensing)

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

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We are, with 25 years of experience, the world leader in network infrastructure services.

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▼ *Ordering information*

ITEM	CODE
G.703 Interface Converter	
Desktop interface converter	MDSE1-IL
X.21 Adaptercable	MDSILCAB-X21
19" Rack Chassis, 48VDC x 2	MDSE1-RM
Redundant 220VAC Power Supply	MDSE1-RMPS
SNMP Management-Card	MDSTAG-SNMP
Converter-Card	MDSE1-ILC