

# DataBand® IMUX



DataBand IMUX and CSI range connect high speed serial data devices together using multiple ISDN calls, in effect dialling a high-speed "leased line" between non-ISDN devices.

Available with 1 or 2 I-Mux serial ports. The ISDN can be partitioned between the 2 ports or access dynamically so 1 port can use all of the ISDN, for example. This gives a great deal of flexibility on potential speeds of different calls.

The Cascade option allows the system to be further expanded.

## Features

- ▶ Basic Rate ISDN inverse multiplexer or I-Mux
- ▶ Single or dual high speed serial ports
- ▶ Up to 4 ISDN 4-wire "S" interfaces
- ▶ Support for T1 Interface
- ▶ One or two V.35, RS530, X.21/V.11 interfaces
- ▶ Clocking hierarchy
- ▶ RS366, control lead, front panel or GUI dialing
- ▶ If 2 ports are fitted each can share/contend or all/part of the ISDN
- ▶ Speeds to 512kbps
- ▶ Supports BONDing standard and 64K 'clear'
- ▶ Option to clock or not clock idle ports
- ▶ Inter-works with other I-Muxes, including Adtran® ISU
- ▶ Interworks with DataBand CSI (Central Site I-Mux)
- ▶ Intuitive GUI and front panel control
- ▶ Local Management serial port and Ethernet port (can be disabled)
- ▶ Password protected
- ▶ Encrypted Management protocol
- ▶ NV RAM stores configuration
- ▶ Dual FLASH banks for updates
- ▶ Extensive Approvals incl Telecoms
- ▶ Low power consumption
- ▶ RoHS compliant

## Specifications

DTE Interfaces	Up to two factory-fit cards available. Any combination: V.35 "MRAC" RS530 25-way "D" – Adtran compatible X.21/V.11 15-way "D" RS366 dialling port 25-way "D" - Adtran compatible
LCD/Front Panel	2 x 16 character LCD 16 button key-pad
Out-going Dialling Options	GUI Front key-pad/LCD Password protected Pre-stored numbers Manual entry of number(s) Control lead – pre-stored RS366
In-coming Call Options	Accept all Accept authorised (CLI) Manual accept Reject all
Data Rates	64kbps to 512kbps (BONDing) 64kbps 'clear'
Inter-operability	BONDing compatible devices, including inverse multiplexers
ISDN switch compatibility	National 1 (USA), 5ESS, DMS100, Euro-ISDN
Power	AC: Internal switch mode supply Standard IEC connector 95-240VAC auto-sensing Max current consumption 100mA @230VAC
Non-Volatile Memory	Non-Volatile Memory
Environment	Operating 0 – 55 °C Humidity 10-90% non-condensing Natural convection cooling
Dimensions	<b>Width:</b> 11.49" [292 mm] <b>Depth:</b> 7.87" [200 mm] <b>Height:</b> 1.73" [44 mm]
Weight	1.4Kgs 2.4lb
Warranty	1 year hardware & software

## Ordering Information

### DB-ISU-512-4S-AC

DataBand ISU inverse mux or aggregator with internal AC PSU. Fitted with 4 x BRI "S" 4-wire NT ports, 1 x RS530 DTE port and 1 x RS366 dialling port. Includes cable pack with 4 x BRI cables 1m and serial control cable 2m and DbManager Lite.

### DB-ISU-512-4U-AC

DataBand ISU inverse mux or aggregator with internal AC PSU. Fitted with 4 x BRI "U" 2-wire NT ports, 1 x RS530 DTE port and 1 x RS366 dialling port. Includes cable pack with 4 x BRI cables 1m and serial control cable 2m and DbManager Lite.

### DB-ISU-512-1P-AC

DataBand ISU inverse mux or aggregator with internal AC PSU. Fitted with 1 x PRI E1/T1 port aggregating up to 512kbps, 1 x RS530 DTE port and 1 x RS366 dialling port. Includes cable pack with 1 x PRI cable 1m and serial control cable 2m and DbManager Lite.

### DB-ISU-1024-1P-AC

DataBand ISU inverse mux or aggregator with internal AC PSU. Fitted with 1 x PRI E1/T1 port with aggregation upgrade to 1.024Mbps, 1 x RS530 DTE port and 1 x RS366 dialling port. Includes cable pack with 1 x PRI cable 1m and serial control cable 2m and DbManager Lite.

### DB-ISU-2U2SBRI-AC

DataBand ISU inverse mux or aggregator with internal AC PSU. Fitted with 2 x BRI "U" interfaces plus 2 x BRI "S" interfaces 1 x RS530 DTE port and 1 x RS366 dialling port. Includes serial control cable and DbManager Lite.

### Optional Accessories (sold separately)

#### PB/cpack/RS

RS530 cable male & female. 2m

#### PB/cpack/X21

X.21/V.11 cable male & female. 2m

#### PB/cpack/MRAC

V.35/V.35 MRAC male and female. 2m

#### PB/cpack/RSM-V35F

RS530 (male) to V.35 MRAC (female) cable. 2m

#### PB/cpack/RSF-V35M

RS530 (female) to V.35 MRAC (male) cable. 2m

# DataBand® IMUX



## Technical Overview

### Routing

A simple and intuitive GUI (Graphical user Interface) makes configuring and routing timeslots fast and easy, with an excellent overall view of E1 to V11/V35 connections.

When running G.703 mode virtually no configuration is required.

Any combination of timeslots can be configured for conversion to the V.11/V.35 interface – they do not need to be consecutive.

DataBand is completely transparent to all data and signalling

### Configuration/Management

DataBand is configured and managed by DbManager

DbLite is supplied with the product and allows visibility of one unit via an intuitive GUI. The optional full version of DbManager supports multiple real-time workstations, provides network-wide visibility of all units and their status.

Configuration/management sessions can be established remotely or locally through the unit's serial port or optional Ethernet port.

SNMP Traps & Alarms are optionally supported.

### Clocking

Software-selectable clock source

High quality 0.15ppm internal clock

From G.703/4 when V.35/X.21 is a DCE (female) connector

Clocks from V.35/X.21 when a DTE (male) connector is specified

Clocking hierarchy with auto-switchover between clocks with no user impact.

Auto recovery to higher priority clocks when they become available.

### Real-Time Clock

Internal battery-backed real-time clock for Event Log time-stamps and debugging purposes.

### Events

Events can be reported automatically to the DbManager via the local serial port or the optional Ethernet.

DbManager writes all Events and Alarms to a flat .csv file in realtime and this file can be manipulated by external tools to format and extract information.

### Routing and Summary Windows

A choice of easy to understand summary windows display the routing configurations. These include a complete display timeslots in use.

### Diagnostics

DataBand provides excellent diagnostic and debug tools with loops able to be set in either direction on any port.

Visibility of control lead status via the DbManager.

### Approvals

The DataBand benefits from a wide range of Safety and Emissions approvals and the E1/T1 G.703/4 port has optional Telecoms Approvals for direct connection to carrier leased lines/networks.

Equipment is RoHS compliant without having to resort to the use of temporary "Exemptions".

### Configuration

Held in non-volatile RAM (retained during power off) and downloadable to/from the DbManager. Configuration files can be saved to a file on a PC.

### Software

New versions of software can be remotely uploaded to DataBand via the DbManager. This is loaded to an off-line sector of FLASH and a confirmation check-sum given. The operator can switch software banks at any time and revert to the original software at any time. If the DataBand is unable to run from the new software, it will revert to the original.