BLACK BOX®
NETWORK SERVICES

The DataBond Leased Line Backup Range

Now you can boost the performance of your router's ISDN backup and ISDN-on-demand links to Nx64 speeds.

Features

Model 64 to Model 2048

- 1 or 2 Leased Lines
- Speeds from 64Kbps to 2.048Mbps
- Fast Dialling or Replacement Capacity
- BRI and/or PRI ISDN
- Remote Feeder to DataBond Chassis System
- Fully upgradable
- Point-to Point, Triangulated & Meshed Networks
- Dual Power
- Relay Protected
- Secure Remote Feeder to DataBond Chassis System
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Why choose the DataBond LLB over other solutions?
It's functionality, flexibility, modularity, expansion capabilities, security, simple installation and management make the DataBond the most attractive solution on the market. Coupled with the inter-working capabilities with other members of the family and its attractive pricing, the DataBond becomes the obvious choice of backup of key services.

- **How does the LLB detect a leased line has failed?**

The DataBond LLB continually monitors for loss of clock or data transitions. The LLB has the ability to monitor CRC's within HDLC – 16-user traffic to identify individual errors. This provides enhanced circuit visibility and enables the DataBond LLB to take backup action prior to the line failing completely.
Simple graphical prompts configure a number of flexible parameters – for example failure/recovery timers, backup windows and ISDN test periods. The failed leased line is continuously checked for recovery. A facility exists to delay switch-back to the primary route ensuring complete reliability.

- **How will I know that the leased line has failed?**

A locally attached GUI highlights any problems; the front panel displays the unit's status; an alarm relay is activated; remote units can dial a central site to report alarms.

- **What business benefits will DataBond bring?**

The DataBond LLB is designed to ensure continued service for applications and users when leased lines fail. The effect of leased line failure without backup can be catastrophic. The costs can be obvious, but more often are hidden in lost time, effort to restart applications, lost sales and/or manufacturing and lost customer confidence. The low cost of a DataBond LLB system is quickly justified after even a single backup event.

- **What systems are suitable for use with the DataBond LLB?**

Any synchronous device that uses a leased line can be safeguarded.

- **How will DataBond affect our users?**

The speed at which ISDN backup is dialed, aggregated and provided to the DTE/application is so fast that users are frequently unaware a leased line failure has occurred

- **What can I use for larger sites?**

The DataBond LLB is ideal for sites with one or two leased lines and can be configured as a point-to-point system or in simple integrated networks.
The DataBond hub supports more leased lines and addresses additional applications. The DataBond 19" chassis is fully compatible with other members of the DataBond family, including the LLB, which can be used as "feeder" devices from remote locations.

- **How flexible is the DataBond LLB?**

The DataBond LLB includes a number of practical features that maximise the use of available resources. BRI, multiple BRI and PRI ISDN access is available. One or two leased lines at speeds from 64kbps to a full 2.048Mbps can be backed up. When supporting a single leased line, optionally a second DTE port can be configured to use the ISDN when not in use for backup. FLASH based memory enables remote software downloads and configurations.

- **Can I upgrade the units?**

Most companies' data requirements grow, similarly the DataBond can be expanded to match changing needs by adding/ changing modules. Backup speeds and ISDN access types are completely upgradable from 64kbps to a full 2.048Mbps using PRI and BRI modules on the four available ISDN ports. The product is upgradable within the range, from a single link 64kbps unit through to a high-speed dual port DataBond LLB.

- **How do I manage and install DataBond LLB?**

The whole DataBond range is very simple to install and manage. The units are configured and controlled by an intuitive PC-based Graphical User Interface (GUI). The GUI indicated the status of both local and remote units. If a problem is detected, remote units can automatically dial the central site to pass status, events and alarm messages. More than one management GUI can exist within a network. A demonstration version of the GUI is available which illustrates its ease of use and gives an excellent insight into the DataBond's capabilities.

- **What about security?**

Incoming calls can be screened by a variety methods, such as DDI, CLI and a user-programmable password, through to a very secure system using a unique factory-set code which is specific to only one DataBond LLB unit

Specifications

Overview

- Supports one or two leased lines, or one leased line and an optional "on demand" port.
- Back up of leased lines running at speeds from 64kbps to 2.048Mbps.
- Aggregates up to 34 "B" channels to provide an extract 2.048Mbps for a single port.
- Two ports, each up to 17"B" channels for 2 x 1.024Mbps
- Up to 4 BRI interfaces (8"B" channels).
- One PRI or one PRI and two BRI (up to 34 "B" channels)
- Any model may be upgraded to any other.
- 290mm wide, 199mm deep and 41mm high.

Interfaces

- Leased line ports – 15 way "density-and-a-half" female "d" supporting V.11 and V.35. Balanced clock, TX and RX leads.
- DTE/Applications port – 15 way "density-and-a-half" male "D" supporting V.11 and V.35. Balanced clock, TX and RX leads.
- Optional G.703 presentation.
- Leased line and application ports are power failure relay protected. If the power is lost the leased line is directly to the application.
- All ISDN interfaces are RJ45 sockets.
- Management/GUI port is an RJ11 socket.
- Cables in various lengths are available.

Power

- An external unit provides power.
- Optional second load sharing supply for added resilience.

Leased Line Failure

- Continually monitors leased line for loss of clock and data transitions.
- Monitors user's HDLC – 16 frames for CRC errors. Identifies line failure/degradation.
- Users set parameters tailor the line failure criteria.
- User set parameters for backup time windows and ISDN test scheduler.
- Monitors loss of transition from the applications/DTE. Inhibits backup action should the applications/DTE fail.
- Half-duplex failures detected.
- Constantly tests the failed leased line. Once recovered for a user set period, data is switched to the leased line and ISDN calls cleared.

Dialling

- Fully automatic when a leased line fails. Should the primary backup destination be unavailable, it is possible to dial an alternate location.
- Scheduled test dialing between locations can be pre-programmed. Tests ISDN and aggregation units without affecting the leased line operation
- When a second port is used for non-leased line backup applications, the second DTE interface supports "control" and "indicate" dialing to a pre-configured destination.

Aggregation

- The Black Box ISDN aggregation system handles domestic, international and satellite routed calls with a maximum differential delay of 700msecs.
- DataBond LLB supplies the application with the requested or maximum available ISDN capacity, and will continue to try and establish any "missing" circuits.
- If an ISDN "B" channel fails (or has excessive errors), the LLB will reduce the data rate to the applications/DTE, re-dial the circuit and increase the data rate.
- Minimum acceptable backup data rates can be configured.
- DataBond LLB handles all aspects of the leased line failure, ISDN call dialing, ISDN Management, leased line recovery, and switch back. Users enjoy enhanced and reliable service levels.
- Fully independent, and transparent to, user data.
- Clocking options and methods are available to support Time Division Multiplexors (TDM's) and Frame Relay Networks. Please contact Technical support for information on 0118 9312233.

Security

- Incoming calls can be screened using CLI, DDI and a password. Calls for management are also password protected.
- Enhanced security is available using a unique factory set identifier. This means calls will only be accepted from authorised DataBond LLB units.

Management

- A clear, easy to follow intuitive Graphical User Interface (GUI) with help files.
- SNMP option supporting traps and alarms within HP OpenView.
- The GUI allows configuration of the local unit and access to remote devices via an ISDN call.
- DataBond LLB can be configured to dial remote systems to report critical alarms.
- Software down line loadable.
- All configuration and events are held in Non Volatile Memory.

BLACK BOX

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Ordering Information

Databond 64	1 Basic	64 Kbps	ISUB641B	ISUT641B	ISUB642C
Databond Dual	1 Basic	2 x 64 Kbps	ISUB642B	----	----
Databond 128	1 Basic	128 Kbps	ISUB1281B	ISUT1281B	ISUB1282C
Databond 256	2 Basic	256 Kbps	ISUB2561B	ISUT2561B	ISUB2562C
Databond 384	3 Basic	384 Kbps	ISUB3841B	ISUT3841B	ISUB3842C
Databond 512	4 Basic	512 Kbps	ISUB5121B	ISUT5121B	ISUB5122C
Databond 1920	1 Primary	1920 Kbps	ISUB 19201P	ISUT 19201P	ISUB19201C
Databond 2048	1 Primary	2048 Kbps	ISUB 20481P	ISUT 20481P	ISUB 20481C
19" Rack Chassis			----	----	RMU 9020
(includes IPSU)					
Redundent PSU			PSU9020	PSU9020	PSU9020

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HOW TO CONTACT BLACK BOX

To place an order call	0118 965 5100	For General enquiries	0118 965 5000
For Technical Support	0118 931 2233	Fax us anytime	0118 931 1727