

https://www.avionteg.com/Ballard-Technology-DL-UA1430-01-Data-Transfer-Units.aspx

DL 615 ARINC 615 Data Loader

Features

- Replaces old 3½-inch floppy disk only PDLs
- Use with any MS Windows[®] compatible PC
- ARINC 615-3 and 603 protocols
- Load from floppy, HD, USB, CD, DVD, or network
- Clear indicators for load progress and status
- · Efficient multi-file, multi-disk and extra-large loads
- Numerous logging options
- Protocol recording and diagnostic tools
- Configurable for problematic LRUs

Portable ARINC 615 Data Loader

The DL 615 is the modern replacement for outmoded 3½-inch floppy disk only ARINC 615 portable data loaders (PDL). Any PC running Microsoft[®] Windows[®] can perform data loads using the USB to ARINC 429 interface, cables, and software included with the DL 615. While being as simple to use as older floppy disk PDLs, the DL 615 provides record keeping, flexibility in data management, and powerful features for troubleshooting and enabling data loads into difficult LRUs. As an added benefit, the interface can be used as a general purpose ARINC 429 (and optionally ARINC 717) maintenance tool.

The DL 615 provides flexibility in how data to be loaded is stored and managed. Data can be loaded from floppy disks, hard disk, USB device, CD, DVD, and even from wired or wireless network locations. The transfer status display (see below) shows exactly how the load is progressing. The logging function automatically keeps a configurable and auditable record of each data load, which can include attributes for date/time, operator, disk set, aircraft tail number, notes, etc. Some LRUs have non-standard timing and can be difficult to load. The DL 615 provides

compliant, tolerant, and custom timing options, which along with the included 615 protocol recording and debugging/diagnostic tools enable the DL 615 to load LRUs that are impossible to load with other loaders.

| 615 BTI615 | Data Loader - ARINC 615 Loader from Ballard | Technology | | |
|-------------------------------|---|---|--|--|
| <u>F</u> ile <u>O</u> pt | ions <u>H</u> elp | | | |
| Data So | urce | | | |
| | 🔿 Floppy Disk 🔚 🛛 🔺 | | | |
| | Other Disk C:\ARINC 615\DATA | Q | | |
| Logging | | | | |
| **** | Endble Edgging | Directory for log files | | |
| | | C:VARINC 615\Logs | | |
| | ording Configuration | | | |
| | Enable bus necording | Directory for sequential data files | | |
| | DATA messages contain zero in data field | | | |
| Transfer | Status | | | |
| i | | | | |
| | Transfer In Disk Change Transfer R Progress Complete | eady TransferFail Read∕Write UnitFail Fail | | |
| | Disk: 1 of 1 | Discrete: 2 | | |
| | File: 1 of 2 (data0.dat) | | | |
| | Block: 10 of 20 | | | |
| Status: Automatic Upload: RTS | | | | |
| File Progress: | | | | |
| | | | | |
| Advance | Bed Connected to interf | ace card 5 | | |

Portable USB-powered kit enables any computer running Microsoft Windows to upload data to ARINC 615-3 and 603 compatible devices

What's Included

- Data loading software (MS Windows)
- ARINC 429 databus to USB interface (also available with ARINC 717)
- 53-pin data loader cable
- 53-pin to 31-pin adapter cable (ARINC 603)
- Locking USB cable
- Rugged carrying case

Applications

- Flightline support
- · Avionics development and testing
- Aircraft maintenance
- System upgrades

Benefits

- Intuitive operation
- · Lightweight, portable and durable
- Modern solution
- Obsolescence proof
- Powered by PC over USB
- Use with any available PC
- Integrates with other applications
- Multipurpose loader/maintenance tool

ASTRONICS



Data Loader Software Main Window

DL 615 ARINC 615 Data Loader

Logging Capabilities

The DL 615 can be easily configured to log data load sessions for record keeping and debugging purposes. Logs can include basic load details only or detailed records with all bus activity. The entry screen below can optionally prompt the user for additional details at the start of a transfer session.

| BTI615 Data Loader - Transfer Details | | | | |
|---------------------------------------|--|--|--|--|
| **** | The information gathered here will be added to the log file. | | | |
| | Operator: | | | |
| | Serial Number: | | | |
| | Disk Set: | | | |
| | Tail Number: | | | |
| | Version Info: | | | |
| | Notes: | | | |
| | | | | |
| | | | | |
| | | | | |
| Do not show this dialog again | | | | |

Transfer Details Entry Screen

Specifications

General

- Includes ARINC 429 interface
- 8 receive, 4 transmit channels standard (other channel counts available)
- Discrete I/O: 8 channels

Computer Interface

• USB 2.0

Cables

- 53-pin data loader cable, 10 ft (3m)53-pin to 31-pin adapter cable
- (ARINC 603), 1 ft (0.3m)
- Locking USB cable, 5 ft (1.5m)

Power

Single USB port

Temperature Range

- Component: -40 to +85 deg C
- Storage: -55 to +100 deg C

Dimensions

- USB Interface: 3.0 x 4.45 x 0.97 in (76 x 113 x 25 mm)
- Carrying Case: 16.0 x 13.0 x 6.9 in (407 x 330 x 175 mm)

Ordering Information

DL 615 Data Loader Kits

| DL-UA1430-01 | Standard data loader kit with |
|--------------|-------------------------------|
| | ARINC 429, 8R4T channels |

Other DL 615 data loader kits are available with various channel counts, ARINC 717, and CoPilot software—useful when using the interface hardware for databus test:

| DL 615 Kit Only | DL 615 & CoPilot* | | ARINC 717 |
|--------------------|----------------------|-------|--------------|
| DL-UA1440-01 | DL-UA1440-02 | 12R4T | _ |
| DL-UA1430-01 | DL-UA1430-02 | 8R4T | - |
| DL-UA1420-01 | DL-UA1420-02 | 4R2T | - |
| DL-UA1431-01 | DL-UA1431-02 | 8R4T | 2R2T |

*Includes CoPilot analysis & test software

nRnT = number of Receive/Transmit channels

The interface hardware is black, for Flight Test Orange add '/FTO' suffix to the above part number. Example: DL-UA1430-01/FTO

Data Loader Components Only

| SW-615-DL | Data loader software only; for use |
|-----------|--|
| | with existing Ballard BTIDriver compatible interface hardware |
| 16080 | 53-pin data loader cable only |
| 16081 | 53-pin to 31-pin adapter cable only |

Using DL 615 Hardware for Databus Test (CoPilot®)

The DL 615 includes one of Ballard's pocket-sized USB 429 databus interfaces. These interfaces provide a high level of ARINC 429 (and optionally ARINC 717) functionality.

By adding Ballard's CoPilot[®] graphical test and simulation software, the DL 615 becomes a highly-effective tool for databus analysis, test, and simulation. CoPilot can be added at any time. However, a discount applies when CoPilot is purchased in a bundle with the DL 615.

'Ordering Information' above shows part numbers for the CoPilot bundle, and various protocol and channel options.

Get More Information

Visit our website for more details and specifications:

USB 429 Interfaces: www.ballardtech.com/USB429 CoPilot Software: www.ballardtech.com/CoPilot

Software Licensing Overview

The Data Loader software license and the CoPilot license were designed to provide maximum flexibility. There are no dongles to lose or expensive site licenses to manage, just a simple software "key" embedded in the Ballard databus interface hardware. The Data Loader software and CoPilot software can be freely installed on as many computers as desired. Any of these computers are authorized to operate the interface hardware containing the license key.

System Requirements

Data loader software and CoPilot software require the Microsoft® Windows® XP Operating System or above.

Suggested Hardware

Intel[®] Core[™]2 Duo, 2 GHz (multi-core) processor or higher, 4 GB RAM, 2 GB of available hard disk space (additional free disk space required for data logging)

Minimum Hardware

1 GHz 32-bit (x86) or 64-bit (x64) processor, 2 GB RAM, 1 GB of available hard disk space



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