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ARINC 615/615A PDL
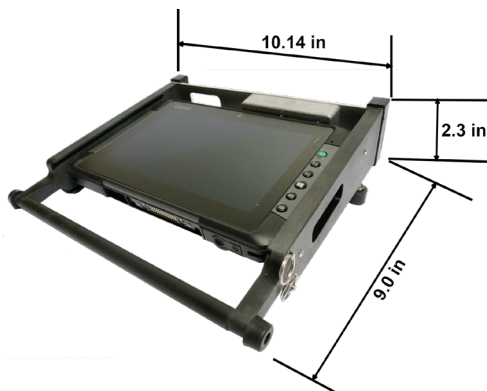
AIT Tablet Based Secure Portable Data Loader

AIT PDL-615-XT

Overview

The AIT ARINC 615 & 615A Portable Data Loader (PDL-615) is a secure, rugged, portable flightline ready system that is designed to perform dataloads to a variety of aircraft LRU's in the fleet. The PDL-615 supports ARINC 615 & ARINC 615A load operations. It is also supports secure data load operations and is compliant with ARINC 835 and ARINC 645. The PDL-615 accepts software parts files from CDROM/DVD, USB, and networked storage locations. Additionally, the PDL inlcudes dedicated internal mass storage (32GB or 64GB). To ensure compatibility with existing ARINC 615 cable assemblies, the PDL-615 includes an integrated ARINC 615 53-pin connector which also includes ARINC 615A (Ethernet) connectivity. Two models are available. The PDL-615-XT is integrated into a rugged transport case and inlcudes integrated cable/accessory storage. The PDL-615 is a rugged but compact version of the PDL.

Key Features

- Supports 615-3/4 Data Loader operations using ARINC 429

- Supports 615A (-1, -2, & -3) Data Load operations over Ethernet & ARINC 664 networks

- Secure Operations (ARINC 835 & 645 Compliant)

- Accepts loadable software parts from any attached USB device (USB Flash Drive, CD-ROM/DVD)

- Optional Network Loadable Software Distribution applications available (but NOT required!)

- 32 GB (or optional 64 GB upgrade) built-in mass storage dedicated to loadable software parts

- Verifies and Validates software parts prior to load operations

- Supports Emulated USB mass storage device loads

- Optional Network Interface Connectivity:

    - 10/100/1000 base-T Ethernet LAN
    - 4G LTE broadband
    - Wireless 802.11ac

Note: Our flexible connectivity options allow you to populate the integrated MSD with or without a direct connection to your network

- Battery powered operation (no aircraft power required)

- MIL-STD-810G and IP65 certified for shock and vibration

- Intuitive & easy to use graphical user interface (web browser based)

- Simple single button load operations with concise status indication

- Audio and Visual indication of successful/unsuccessful load operations

10.14 in

2.3 in

9.0 in

PDL-615 Dimensions

PDL-615

MADE FOR FLIGHTLINE OPERATIONS

The PDL-615 is designed for ease of use by the flightline maintenance engineer. The PDL features a simple user interface that provides visual and audio alerts when load operations are completed. The User Interface is intuitive and easy to use eliminating the need for time consuming software training. All Data Loading activity can be logged, and any error conditions are timestamped and logged for post analysis and troubleshooting.

The PDL includes an internal wrap self-test and also a complete loop-back self-test (with optional external loop-back cable assembly.

ORDERING INFORMATION

PN: PDL-615

Rugged, battery powered ARINC 615 Portable Data Loader with standard ARINC 615 53-pin connector. Supports ARINC 615-3/4 (and ARINC 844) operations over ARINC 429. Integrated 32GB dedicated loadable software storage capacity. Supports secure operations (ARINC 835 & 645 Compliant). Includes AC Power Adapter (for charging) and Li-Ion battery (7.4V, 4200mAH).

PN: PDL-615-XT

Rugged, battery powered ARINC 615 Portable Data Loader with standard ARINC 615 53-pin connector. Supports ARINC 615-3/4 (and ARINC 844) operations over ARINC 429. Integrated 32GB dedicated loadable software storage capacity. Supports secure operations (ARINC 835 & 645 Compliant). Includes AC Power Adapter (for charging) and Li-Ion battery (7.4V, 4200mAH). Integrated into Pelican iM2100 rugged case.

PDL-615-XT

PN: PDL-615A-SW

ARINC 615A Portable Data Loader, Software Only, Solution. Supports ARINC 615A (Ethernet & A664) operations over standard LAN Interfaces. Software Only solution which installs on any Windows 10 host system with a LAN interface.

OPTIONS & UPGRADES

-615A
Adds support for ARINC 615A Load operations over 10/100 Base-T Ethernet (via the ARINC 615 53-pin connector).

-4GLTE
Adds 4G LTE muti-carrier mobile broadband connectivity(data service provider plans NOT inlcuded).

-64GB
Upgrades the standard 36GB integrated mass storage to 64GB.

OPTIONAL ACCESSORIES

PDL-BATTERY
2nd PDL Battery (14.4V, 2100mAH). Used concurrently with integrated PDL battery to extend operational time Hot swappable

CBL-PDL-615
Standard 10-foot ARINC 615 cable for PDL (53-pin male) to aircraft connections (53-pin female).

CBL-PDL-615A
Adapts PDL 53-pin connector to standard RJ-45 socket.Supports ARINC 615A loads over standard Ethernet RJ-45 connections.

CBL-615-603
Standard 1 foot ARINC 615 to ARINC 603 adapter cable. Adapts LRU end of CBL-PDL-615 to ARINC 603.

CBL-PDL-LOOPBACK
Loopback cable assembly (for 53-pin ARINC Connector). Allows full diagnostic built-in selftest.

PDL-CASE-1600
Rugged, watertight, crushproof, dust-proof storage & transport case for PDL, cables, and accessories. Dimensions (Outside): 24.25" X 19.43" X 8.68"

PDL-CASE-1520
Rugged, watertight, crushproof, dust-proof storage & transport case for PDL and accessories. Dimensions (Outside): 19.78" X 15.77" X 7.41"

Technical Data

615/615A Loader Interface	• ARINC 615 53-pin (male) connector • ARINC 429, 3 Tx / 6Rx with DO-160G level 3 lightening & transient protection • 4 Open Drain Discretes with DO-160G level 3 lightening & transient protection • Ethernet 10/100 Base-T with DO-160G level 3 lightening & transient protection
Loadable Software Parts Storage	• 32GB Dedicated Mass Storage Device (MSD) (up to 64GB with -64GB option) • External CD-ROM/DVD or External USB Flash (via USB 2.0 I/O)
Display	8.1" TFT LCD HD (1280X800)Sunlight readable display with muti touch
Dimensions & Weight	10.14" X 9.0" X 2.3" 4.2 lbs (Approx) -XT 14.2" X 11.4" X 6.5" 10 lbs (Approx) (weight assumes second PDL Battery)
Temperature & Humidity	• Operating Temp. -21C to 50C • Storage Temp. -40C to 71C • 95% RH, non-condensing
I/O Interfaces	• (1) USB 2.0 (Micro-B socket) • (1) Headphone out/Mic-in Combo • One DC Input (power & battery charging)
Communications Interfaces	• 10/100/1000 base-T Ethernet • Wireless-AC 7625, 802.11ac • 4G LTE muti-carrier mobile (optional with -4GLTE)
Power	• AC Adapter (65W, 100-240VAC, 50/60Hz) • Li-Ion battery (7.4V, 4200mAH) • Optional 2nd battery (14.4V, 2100mAh)