



AVIONICS
INTERFACE
TECHNOLOGIES
A Teradyne Company

Portable Data Loader Solutions

AIT's family of Portable Data Loaders (PDL) provide a secure, flexible, compact, rugged, and easy-to-use solution for data loading Field Loadable Software (FLS) to a wide variety of aircraft LRU's across a fleet. AIT's PDLs are intelligently designed to seamlessly meet the latest cybersecurity compliance requirements while also saving time and money.

KEY FEATURES & BENEFITS

- **Simple** - Interactive touchscreen interface designed for ease-of-use, eliminating the need for time-consuming training.
- **Intuitive** - Provides visual and audio alerts after load operations are completed; jobs are logged with any error conditions timestamped for post analysis and troubleshooting.
- **Flexible** - Comprehensively adaptable, loads any ARINC 615 or 615A compatible avionics system on a wide array of aircrafts via standard & non-standard interfaces. (see compatibility list page 2).
- **Modern** - Automatically downloads Field Loadable Software (FLS) updates & uploads aircraft system data/logs when network connected to AIT's Fleet Data Command Center SaaS Solution (FDCC-SaaS).
- **Secure** - Is ARINC 645 & 835 compliant, supports airline operations which comply with FAA's ANSOG (Aircraft Network Security Operator Guidance).

Available in two models, the PDL-615 & PDL-615-XT. The PDL-615-XT is integrated into a specialized rugged transport case to provide ultimate durability. Both PDL's are designed for ease of use by the flightline maintenance engineer. Our PDL's accept software parts from a diverse set of sources, including attached USB devices (USB Flash Drive, CD-ROM/DVD) as well as automatic downloads via network connection to AIT's modern FDCC-SaaS application. Both PDL's include internal, encrypted, mass storage (32GB or 64GB) with capacity dedicated to store all loadable software parts as well as data and logs downloaded from aircraft systems.

Our PDL's support loading to any ARINC 615 or 615A compliant aircraft system. Unique to AIT, we also provided PDL accessories to support load operations via non-standard interfaces, which include emulated PCMCIA and USB mass storage devices (MSDs), and serial bus load interfaces such as RS-232. Powered by a rechargeable battery operation, no aircraft power is required.



Figure 1: AIT PDL-615-XT

Built with comprehensive security features, including:

- Checks of ARINC 835 software parts digital signatures upon import and prior to load operations.
- Encrypted storage of all software parts.
- Enhanced electronic access controls including disconnection from ground networks (wired & wireless) during all aircraft load operations.
- Utilizes a hardened operating system and a Trusted Platform Module (TPM) to secure hardware with integrated cryptographic keys.
- Enhanced logging of all operations & access attempts.



Figure 2: AIT PDL-615

KEY SUPPORTED AIRCRAFTS & APPLICATIONS

- | | |
|------------|------------|
| • B787 | • A300 |
| • B747-400 | • A320 |
| • B747-8 | • A321-NEO |
| • B757 | • A321-XLR |
| • B767 | • A350 |
| • B737 | • A380 |
| • B737 MAX | • ARJ21 |
| • B777 | • C919 |
| • MD11 | |

The AIT PDL-615 & AIT-PDL-615-XT are ARINC 615 & 615A compliant and are capable of loading any avionics systems via ARINC 615 & 615A.

POPULAR SOFTWARE APPLICATIONS

- Loading software to the Rockwell Collins GGU (Graphics Generator Unit)*
**Part of the 757/767 Rockwell Collins LDS (Large Display System) upgrade*
- Loading Navigation Databases to the NG FMC (Next Gen Flight Management Computer)
**Part of the NG FMS (next gen Flight management system) upgrade*
- Downloading data from the LEAP aircraft engines

ORDERING INFORMATION

PDL-615

Portable Data Loader for ARINC 615 & 615A Data Load Operations. ARINC 645 & ARINC 835 Compliant. Supports ARINC 615A data load operations over Ethernet and ARINC 664 networks.

PDL-615A-XT

Portable Data Loader integrated to rugged transport case. For ARINC ARINC 615 & 615A Data Load Operations. ARINC 645 & ARINC 835 Compliant. Supports ARINC 615A data load operations over Ethernet and ARINC 664 networks.

PDL-615-GBS

Auxiliary Snapback Li-Ion battery (2100 mAh)

About AIT

AIT is headquartered in Beavercreek Ohio. The company has distribution and support offices worldwide and is a leading designer and manufacturer of Data Loader solutions, high-performance avionics test instrumentation and interfaces, flight test instruments, and high speed avionics simulation systems. For more information, visit www.aviftech.com.

CBL-PDL-615

Standard ARINC 615 PDL Cable for connection of PDL to standard aircraft 53-pin data load connector. 3 Meter.

CBL-615-603

ARINC 615 to ARINC 603 Adapter cable. 12 inch.

CBL-PDL-615A

ARINC 615A PDL Adapter cable. Adapts PDL 53-pin connector to Ethernet RJ-45 standard Ethernet connection. 12 inch.

CBL-PCMCIA-ATA-LIN

PCMCIA Type II, Linear Memory & ATA Emulator for use with PDL-615 and PDL615-XT