



PDL Mk.III GARDT®

ARINC 615/615A Portable Data Loader



- ARINC 615 and ARINC 615A data loading via standard aircraft Data Loading Connector
- TechSAT GARDT® Technology for secure data loading according to Airbus Security Requirements for Portable Data Loader
- Compatible with any Windows® laptop / PC
- Direct data loading from USB 3.5" floppy disk, USB DVD drive, USB stick, or HDD media repository
- Import of load parts from all types of USB media or via LAN to HDD media repository
- TechSAT GARDT® (GuARded Data loading Technology) device providing 4 Tx and 8 Rx ARINC 429 channels, 4 function discretes, and Ethernet interface
- ARINC 615 load cable included, specific adapter cables available (e.g. A603, RJ45, FADEC, MDDU)
- Fully compliant with standard PDL adapter cables
- Interface to FLS Management Systems, e.g. eESM Lufthansa Technik





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Application Scope

TechSAT's portable data loader **PDL Mk.III GARDT®** is an integrated software and hardware solution for loading aircraft software parts, such as databases and operational programs, into airborne computers according to the ARINC 615, ARINC 603, ARINC 615A, ARINC 645-1, and ARINC 835 standards.

Features

The loader is based on commercial-off-the-shelf parts and components.

The assembly's system design and the assembly itself are targeted at fulfilling ground support equipment (GSE) requirements. TechSAT's GARDT® Unit, which is compliant to the Airbus Security Requirements for Portable Data Loader, supplies the ARINC 429 resources.

TechSAT's PDL GARDT® Frontend application for Windows® serves as data loader utility.

The load parts can be imported to the internal media repository via any media type supported by the host computer.

The PDL Mk.III GARDT® is delivered with a standard data loading connector cable used to connect to A615 and A615A LRUs.

An interface to any FLS Management tool can be provided on request.

eEnabled Software Management

“eESM” - the innovation project of Lufthansa Technik

Based on decades of experience in aircraft maintenance, LHT developed a beneficial administration software tool, which supports the entire data handling process of LRU software updates.

The complete set is distributed under the brand name **eEnabled Software Management (eESM)** including TechSAT's Portable Data Loaders as the core product for data loading tasks.

PDL Sync Solution

The PDL Sync is TechSAT's lightweight solution for Electronic Distribution of Loadable Software Aircraft Parts (eliminating the need for physical media). It provides the following features:

- > Central management of software parts for entire fleets
- > Electronic distribution of software parts to PDLs
- > Definition of aircraft configurations at tail sign level
- > Tracking of data loading operations

Technical Data

Features GARDT® Unit

- Linux based single board computer
- 4 A429 transmitter channels
- 8 A429 receiver channels
- 4 function discretes
- 1 Ethernet interface
- Powered through the aircraft Data Loading Connector
- Compliant to Airbus Security Requirements for Portable Data Loader

Interfaces, Connectors

- USB 2.0 type B connector for connecting to the host computer
- D-sub 50 connector for connecting the loader cable
- Power inlet for connecting the loader cable or a power cable

Power Supply

- 110 V/400 Hz via aircraft Data Loading Connector
- 28 VDC via aircraft Data Loading Connector
- 12 VDC 2A via power supply
- 10 W maximal consumption

Physical Dimensions

- Size outside: L 150 mm, B 105 mm, H 90 mm
- Weight in total: 980 g

Operating Environment

- Temp. operating: -10 °C to 55 °C
- Temp. storage: -20 °C to 60 °C
- Humidity operating: 30% to 80% RH non-condensing

Software Support

- PDL GARDT® Frontend for Windows® 7/10 32 bit/64 bit

Scope of Delivery

- A429 USB GARDT® Device for Data Loading (PN 403560)
- PDL GARDT® Frontend CD (PN 202132)
- A615-3 load cable, 200 cm with A/C power (PN 602849-020)
- USB cable 2.0, 180 cm, Typ A-B (PN 1004630)
- DC power supply

Extras

- FADEC load cable (PN 1015652)
- A603 adapter cable, 10 cm (PN 602589-001)
- MDDU adapter cable (PN 602751-003)
- GARDT RJ45 adapter cable (PN 603028-001)
- External 3.5" USB floppy drive (PN 1016518)
- External 3.5" USB DVD drive (PN 1010081)

Part Number

- 403561/PDL Mk.III GARDT®