Data Sheet

PDL Mk.II
ARINC 615/615A Portable Data Loader

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eEnabled Software Management

The Perfect Solution designed with our
Innovation Partners
Lufthansa Technik & Corena

eEnabled Software Management
Lufthansa Technik
Data Loader Adapter
Data Loader Family

eESM@techsat.com

- ■ All-inclusive PDL for ARINC 615/603 and optional ARINC 615A data loading
- ■ Robust and reliable PDL for the shop floor environment, hardened touch screen, operable under extreme environmental conditions (e.g. high temperature)
- ■ All kinds of media access supported: via USB (3.5" floppy disk, DVD, mass storage devices), Ethernet, WiFi, or 3G/UMTS
- ■ Standard Windows® operating system
- ■ Rugged outside connectors for LAN and power
- ■ Three external power operation modes: 230 V AC/50 Hz, 110 V AC/60 Hz, and A/C power 115 V AC/400 Hz
- ■ A615 load cable and A603 load stub cable adapter in cable storage included, specific cables (e.g. FADEC) available
- ■ Fully compliant with standard PDL adapter cables
- ■ Certified by Airbus and recommended by Boeing, used by airlines and MROs worldwide
- ■ Upgradeable to TechSAT GARDT® (GuARded Data loading Technology), which is compliant to the Airbus security requirements
- ■ Interface to FLS Management Systems, e.g. eESM Lufthansa Technik

Test & Integration Systems   Products   Software Solutions   Service & Support

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PDL Mk.II

ARINC 615/615A Portable Data Loader

Application Scope

TechSAT's portable data loader **PDL Mk.II** 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, and, optionally, ARINC 615A standards.

Features

The PDL Mk.II is protected by a watertight, crushproof, and dust-proof housing, which ensures safe operation even in harsh flightline environments.

The loader is built from 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.

The core system consists of a ruggedized notebook PC. TechSAT's A429 data loading unit supplies the ARINC 429 resources. TechSAT's PDL Frontend application for Windows® with A615 and A615A functionality serves as data loader utility.

The load parts can be imported to the internal media repository through various media types, either via the USB port of the PDL or by connecting the PDL to an internal LAN.

The backside of the protector case is used as cable storage for the different types of connector cables required to connect the PDL Mk.II to A615, A603, or 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. In close cooperation with its partner companies Corena and TechSAT, LHT extended this software to an integrated tool set which consists of three parts, using state-of-the-art technology, forming the all-encompassing solution:

> the eESM software configuration / distribution management tool
> the Data Loader Adapter
> the Data Loader Family

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.

Technical Data

Notebook Features
- Full-ruggedized Panasonic Toughbook CF-19
- 320 GB HDD shock-mounted and quick-release
- 10.1" 1024x768 XGA touchscreen display
- Battery:
  - Battery operation: 9 hours (acc. Panasonic)
  - Battery charging time: 4.5 hrs. off / 6.5 hrs. on (with 110 V AC/60 Hz, 230 V AC/50 Hz, or 115 V AC/400 Hz external power)
- Housed in rugged polyethylen protector case

A429 Unit
- USB high speed operation
- 4 A429 transmitter channels
- 8 A429 receiver channels
- 4 function ground open discretes
- All signals galvanically isolated

Interfaces, Connectors
- Internal connectors (inside protector case):
  - 53-pin ARINC 615 receptacle for connecting the A615-3 load cable
  - Standard USB port for connecting external USB devices
- External connectors (outside protector case):
  - 3-conductor C14 power receptacle with ON/OFF switch to connect the PDL to an external 230 V AC/50 Hz, 110 V AC/60 Hz, or 115 V AC/400 Hz power supply
  - RJ45 Ethernet socket with cover (e.g. for LAN access)

Power Supply
- 230 V AC/50 Hz (via external power inlet)
- 110 V AC/60 Hz (via external power inlet)
- 115 V AC/400 Hz (via external power inlet)

Physical Dimensions
- Size outside: L 462 mm, B 340 mm, H 170 mm
- Weight in total: 9.5 kg

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 Frontend for Windows® 7 32 bit/64 bit

Scope of Delivery
- Toughbook CF-19, US or DE keyboard
- PDL Frontend CD (PN **202115**)
- A615-3 load cable, 250 cm (PN **602513-025**)
- A603 adapter stub cable, 10 cm (PN **602589-001**)
- 2 Power cables, US and European standard

Extras
- FADEC load cable (PN **1015652**)
- A603 load cable, 200 cm (PN **602829-020**)
- A615A Data Loading for PDL Frontend (PN **202161**)
- External 3.5" USB floppy drive (PN **1016518**)
- External 3.5" USB DVD drive (PN **1010081**)

Part Number
- 403474/PDL Mk.II

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