

IT-DTD

Data Transfer Device
portable Key Loader
for NATO Customers



IT-DTD (Data Transfer Device) is a ruggedised, battery powered, handheld fill device designed to securely receive, store and transfer key material (for both symmetric and asymmetric algorithms) which can then be loaded onto a generic End Cryptographic Unit (ECU) or secure device supporting the EKMS 308 interface.

IT-DTD is able to receive COMSEC material from another Data Transfer Device or from an Electronic Key Management System (EKMS) through the same standard interface. It greatly simplifies the key loading procedure, increases security compared to traditional Fill Devices, and ensures key loading capabilities on a wide variety of ECUs. IT-DTD is further compatible with various Common Fill Devices (CFDs).

IT-DTD supports both DS-101 and DS-102 interfaces in accordance with EKMS 308 standard. The IT-DTD can work in any operational scenarios where ECUs are deployed (terrestrial, naval, avionic) and in different operational environments (strategic, tactical, vehicular).

With an electronic pen and a touch pad, the user can configure and use the device, start receiving or transmitting crypto material and audit data through the EKMS 308 interface.

KEY BENEFITS

- Ruggedised for use in military environments
- Secure key loading on EKMS 308 compatible encryption devices
- Able to host up to four different algorithms approved for internal crypto material storage
- Full integration with EKMS systems
- Import via air gap of encrypted keys from NATO DACAN EKMS (DEKMS)
- Easy and quick activation of the NATO operational context using the provided CIK (Crypto Ignition Key) to enable or disable the device
- Secure storage of black/red material up to 2GB
- Supports NATO encryption Algorithms for the protection of classified information up to NATO SECRET level.



GENERAL CHARACTERISTICS

Main features include:

- Management of both symmetric and asymmetric keys
- Scalability for additional applications to support future ECU in case of specific needs
- Accounting information on keying activity in accordance with SDIP 293 and AC/322-D(2006)0069, log on user activity and alarms
- Storing of key material in encrypted form
- Traffic Encryption Key (TEK)
- Key Encryption Key (KEK)
- Transfer Key Encryption Key (TrKEK)
- Application Key (APK)
- Send/receive keys to/from external Fill Gun devices
- Transfer of keys to/from Crypto devices supporting DS-101 and DS-102 protocols (now described in "EKMS 308 Rev F" standard), plus some specific device types (Saturn ECCM radios, MIDS Link-16 and MIDS BU2, NGIFF/IFF Mode 5 equipment) embedding crypto capabilities
- It can interpret key tagging information as defined in EKMS 308
- Pushbuttons to control HMI (movement, Enter and Escape), switch on/off and brightness regulation
- Management firmware based on a certified COTS Linux-based kernel.

SECURITY FEATURES

IT-DTD has the following security features:

- Secure storage up to 2 Gbytes of red or black material received through EKMS 308 interface
- "Erase" switch to zeroize
- Anti-tampering mechanism
- CIK (Crypto Ignition Key) to enable/disable the device and to allow a rapid declassification to CCI
- Two different profiles of users to manage the device (SuperUser) and to manage the relevant material (User).

TECHNICAL SPECIFICATION

INTERFACES

- EKMS 308 for red or black material

SECURITY

- NATO approved algorithms
- Equipment enabling by CIK; in this case, declassified to CCI when CIK is removed
- Anti-Tampering mechanism
- Key zeroization in emergency
- Tempest compliant SDIP-27/1 Level A

MANAGEMENT

- Built in Test (BIT)
- System and Security Alarms
- Local Event Log
- Local control: touch display and pen

POWER SUPPLY

- Rechargeable Battery with supplied AC-DC converter (100–240V AC, 47Hz–63Hz)
- 8 hours of operations

PHYSICAL DATA

- Dimensions (w x h x d) 92 mm x 192 mm x 58 mm
- Weight 1.3Kg

ENVIRONMENTAL DATA

- Operating temperature -20°C to +50°C
- Storage temperature -40°C to +65°C
- Relative humidity 10% to 90%, 40°C
- Storage altitude 10,000 m
- Operating altitude 4,000 m

For more information:

infomarketing@leonardo.com

Leonardo Electronics

Via Tiburtina, Km 12.400, 00131 Rome-Italy
T +39 06 41501, F +39 06 4131133



leonardo.com

This publication is issued to provide outline information only and is supplied without liability for errors or omissions.
No part of it may be reproduced or used unless authorised in writing.
We reserve the right to modify or revise all or part of this document without notice.

2025 © Leonardo S.p.A.

EL00025 03-25

