

DTS-K

LINK 11 DATA TERMINAL SET WITH EMBEDDED CRYPTO

IMPROVING ALLIED INTEROPERABILITY.

The Leonardo DRS DTS-K CP-2635(C)/A – Link 11 Data Terminal Set with Embedded Crypto (also known as DTS-K) is a compact solution integrating data link modem and cryptographic equipment in one chassis for airborne (fixed or rotary wing) or platforms with size and weight constraints. The DTS-K is based on a VME bus-based chassis and circuit boards with proprietary software, which enables the unit to perform as a Link 11 data terminal set with the KG-11 cryptographic functions of a Link 11 network NCS or Picket. The DTS-K is certified by the National Security Agency (NSA).

The DTS-K has three primary functions in a Tactical Data Information Link (TADIL) network. First, the DTS-K interfaces to the tactical computer for network message traffic to pass from one net station to another. Second, the DTS-K performs encryption and decryption of the message traffic to NSA Communication Security (COMSEC) standards. Finally, the DTS-K phase modulates and demodulates the encrypted data to audio tones for transmission and reception by either HF or UHF radios.

The DTS-K generates both Convention Link 11 Waveform (CLEW), and the Single-tone Link 11 Waveform (SLEW) for improved performance in the presence of multipath commonly found in the HF environment.

Designed for demanding airborne environments, the DTS-K has a remote control (e.g. from the cockpit) interface that enables remote operation of the unit via a control head or computer over an RS-232 interface.

Future versions of the DTS-K will provide the ability to perform MODEM and cryptographic functions for both Link 11 and Link 22 network operation.



LINK 11 DATA TERMINAL SET WITH EMBEDDED CRYPTO

HIGHLIGHTS

- Certified by NSA
- Lower costs than the equivalent Link 11 configuration
- Half the size and up to 70 pounds lighter than the equivalent Link 11 configuration with separate crypto
- Double the reliability
- Embedded “red-black” separation
- Built-in-test (3 levels)
- Optional Link Monitoring System (LMS)
- ARINC mounting tray
- Meets MIL-STD-188-203-1A

SPECIFICATIONS

PHYSICAL FEATURES	
Dimensions (H x W x D)	7.62 x 4.88 x 12.62 inches 19.55 x 12.39 x 32.05 cm
Weight	20 lbs. (9.07 kg)
ELECTRICAL FEATURES	
Power	24 to 32 VDC, 18 watts max.
ENVIRONMENTAL FEATURES	
Operating Temperature	-4°F to +131°F -20°C to +55°C
Non-Operating Temperature	-40°F to +185°F -40°C to +85°C
Vibration	MIL-HDBK-5400 paragraphs 4.6.2.5.1 and 4.6.2.5.1.2
Humidity	95% with condensation
Shock	MIL-HDBK-5400 paragraphs 4.6.2.6.1 and 4.6.2.6.2
Altitude	35,000 feet (10,668 meters)
EMI	MIL-STD-461E for Navy Aircraft
TEMPEST	NSTISSAM TEMPEST and CNSS Advisory Memorandum TEMPEST 01-02

INTERFACE PARAMETERS	
Audio interface with radio transformer coupled, independent USB and LSB	
Transmit level/impedance -22 to +3 dBm composite, 600 Ohms balanced	
Serial (ATDS) computer interface	Transformer coupled
Remote control interface	9600 asynchronous serial
Multi-tone characteristics	Differently coherent DPSK
Single-tone characteristics	8-PSK IAW SPAWAR-S-850
RELIABILITY / MAINTAINABILITY	
Mean Time Between Failure (MTBF)	10,000 hours per IAW MIL-HDBK-217F
Mean Time to Repair (MTTR)	(org level) 5 minutes

Cleared for Public Release DRS Advanced ISR, Inc. dated June 03, 2013. Export of DRS Advanced ISR, Inc., Inc. products is subject to U.S. export controls. Licenses may be required. This material provides up-to-date general information on product performance and use. It is not contractual in nature, nor does it provide warranty of any kind. Information is subject to change at any time. Copyright © DRS Advanced ISR, Inc. 2019. All Rights Reserved.

REV 3 | November 2019

Leonardo DRS Airborne & Intelligence Systems
2601 Mission Point Blvd. Suite 250, Beavercreek, OH 45431 USA
Tel. +1 937.306.3375
NetworkComms@drs.com | LeonardoDRS.com/AIS

