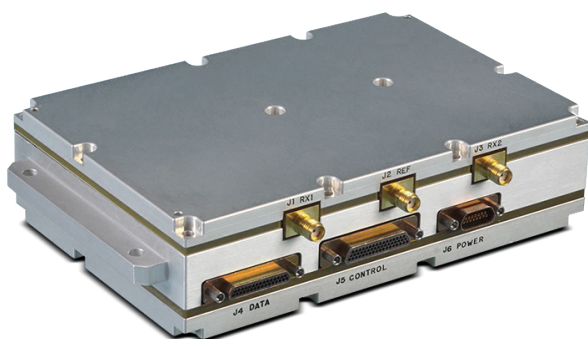


Common Data Link (iCDL)

The iCDL radio provides the warfighter with a complete yet affordable solution to bring wideband wireless data link capability to airborne, surface, and maritime platforms. Our iCDL implements a full suite of waveform modes that ensures interoperability with fielded CDL systems at a significantly lower size and cost.

Designed to grow to meet future standards, this next generation common data link radio leverages programmable hardware and advanced software radio design architectures to provide a comprehensive solution. Its simple IP interface to the platform and full duplex Ku-band outputs are packaged in a single, ruggedized module for greatly simplified platform integration.

BAE Systems is a pioneer and leader in narrowband and broadband communications technologies, with more than two decades of core expertise in software-defined radios. Our iCDL radio has merged the latest generation wideband, high speed hardware, and software technologies to provide the warfighter with the interoperable broadband data link communications solution needed today — and ready tomorrow.



The iCDL's reduced size and weight minimizes its power footprint and eases installation. It is suited for ground and airborne platforms, as well as manned and unmanned vehicles.

Features and benefits

- Supports interoperability with legacy CDL modes
- Advanced programmable design allows for additional waveforms including BE-CDL and next generation networking waveforms
- User friendly graphical interface simplifies iCDL control and management for operator
- Advanced signal processing allows embedded multipath mitigation algorithms in dual-receive configuration and advanced beamforming in dual-transmit configuration
- Antenna agnostic tracking and scanning algorithms allows for interfacing to phased array antennas as well as conventional, mechanically steered antennas

Specifications

Performance characteristics

Size: 4 in. x 6 in. x 1.5 in. (L x W x H)

Weight: 1.5 lbs (0.68 kgs)

Operating input voltage range: 9 – 36 VDC

Supports 28 VDC IAW MIL-STD-704/1275

Output power

+10 dBm (35 dBm version available)

Supports 30 dB of transmit power control

Power consumption: 30W

Frequencies (Ku-Band):

14.4 – 15.35 GHz with 5 MHz spacing

Data rates

Full-duplex data rates from 200 Kbps to 274 Mbps

Supports both standard CDL (STD-CDL) and bandwidth efficient CDL (BE-CDL) WFs (software upgradeable)

Encryption: supports Type 1 or AES-256

Data interfaces

Two 1000 base-T Ethernet (data)

Two 100 base-T Ethernet (control)

IPv4/IPv6 capable

Vibration and shock: MIL-STD-810G

EMI/EMC: MIL-STD-461F

Operating temperature: -40°C to +55°C

Operating altitude: up to 50,000 ft

iCDL configurations

iCDL Radio without encryption:

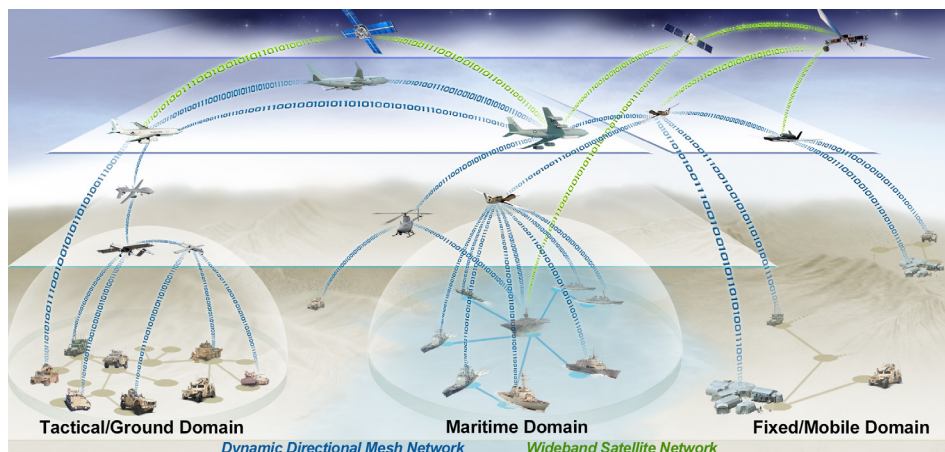
WBX-2010: iCDL RT – Single Tx/Rx, Ku-Band

iCDL Radio with Type 1 encryption:

WBX-2011: iCDL RT – Single Tx/Rx, Ku-Band

Multi-RF/alternate RF configurations

available (L-Band, S-Band, C-Band, X-Band, Ku-Band)



For more information

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