

Overview

The CWCT is an affordable, high-performance Common Data Link (CDL) Compliance Waveform Tester that offers full support for the Standard CDL waveform specification with the capability to compliance test CDL terminals.

Designed to test all types of Standard CDL terminals, the CWCT can be configured to act as either a Surface Communications Element (SCE) or a Platform Communications Element (PCE) in its testing. The CWCT supports both cabled and over-the-air testing.

Consisting of six portable transit cases, the CWCT is capable of testing both a terminal's RF interface as well as its digital data interfaces by simulating sensor or processor information. It supports all current and legacy data formats: IP, Ethernet, ATM, and Serial. It also supports all in-band messaging channels, such as EFC/EFD, NAV, Range and Audio and verifies that those channels conform to the specification. All testing is performed in an automated fashion, with full test reports generated for each conducted test.

Applications

- Compliance testing of all CDL terminal equipment configurations to the STD-CDL Waveform and applicable Capstone requirements
- Troubleshooting at every stage, including multiplexer structure, frame length, synchronization, randomization, differential encoding, forward error correction, interleaving, spectrum spreading, modulation, frequency conversion, and signal polarization
- Engineering System Integration and Test verification tests prior to interoperability test

Key Features

- Configurable for SCE and PCE emulation and compliance testing of CDL terminals
- Automated test software with a graphical user interface and extensive reporting capability
- Industry leading commercial-offthe-shelf test instrumentation embedded into rugged transit cases
- Full rate coverage of STD-CDL Waveforms (.20 to 274 Mbps) with ability to tap into waveform process stages for data analysis or simulation verification
- Single User Interface with ability to record real time and static results
- Ability to process classified and unclassified sensor data