

# 915MHz Data Link Test Set (DTS)

35 Hill Ave Fort Walton Beach FL 32548 | PH: 1-888-325-9422 | Fax: 1-850-243-1378 | [www.gomicrosystems.com](http://www.gomicrosystems.com)



## Features

- Rugged completely sealed design
- Linux user interface
- Direct and Radiate mode operation
- 915MHz datalink
- Digital and Analog signal interfaces
- Ruggedized laptop controller
- 10Base100 Ethernet Interface

## Applications

- Vehicle checkout
- Bench test
- Go/No-Go test

## Description

The 915MHz Data Link Test Set (DTS) is a portable test instrument used for verification of Data Link Subsystem Replacement (DLS-r), Army Ground Station Unit (GSU), and other 915MHz Gulf Range Drone Control Systems (GRDCS) communications equipment in compliance with the GRDCS Data Link Format Specification. It includes a ruggedized laptop control interface that provides a modern Linux-based computer environment for ease of operator use and high reliability. The DTS is designed to provide complete closed loop (telemetry and command) test capabilities. It simulates and displays telemetry parameters of the Unit Under Test (UUT) providing a complete system environment that allows for full test and checkout of the electrical subsystems.

The DTS interfaces to the DLS-r via a 915-MHz Radio Frequency (RF) datalink through either a direct connection using an RF cable or in radiate mode using an antenna. The test set displays all target telemetry and system status information while allowing the test operator to transmit commands and receive telemetry.

The DTS is ruggedized for use outside or in a hangar/lab environment. Other configurations are available.

# Technical Specifications

AS9100 Rev. C and ISO 9001-2008 Certified

## General

- **Frequency:** 915 MHz +/- 9.15 kHz
- **Modulation:** BPSK
- **Antenna Port:** TX/RX, 50 ohms type N connector, Maximum VSWR 1.5:1
- **Operating System:** Windows/Linux (dual boot)
- **Test Points:** Sync, Code A, Code B, FSEL, TX Gate, TX Code, PROGEN, and +28VDC

## Transmitter

- **Frequency:** 915 MHz +/- 9.15 kHz
- **Transmitter Power:** 0 to -100dBm (Direct),  $\geq$  0dBm (Radiate)
- **PRF:** 1 to 20 Hz
- **Modulation:** BPSK

## Receiver

- **Frequency:** 915 MHz +/- 9.15 kHz
- **Dynamic Range:** +30 dBm to +60dBm (Direct), +5 to  $\leq$  -75 (Radiate)

## Functional Tests

- Receiver Sensitivity
- Receiver Dynamic Range
- Transmitter Power
- Current Draw
- Variable DC Voltage (22 – 32 VDC)
- Multiple GRDCS Messages, Data Quality Verification
- Automated or Manual Testing
- Radiate Test and Range Monitoring
- Frequency/Spectrum Monitoring with External Test Equipment

## Environmental

- **Temperature:** Operating: 0°C to +40°C  
Storage: -20°C to +60°C
- **Pressure:** Sea level to 4000ft MSL

## Power Requirements

- **Input Voltage:** 115 +/- 10 VAC, 47 - 63 Hz Single Phase

## Physical

- **Dimension:** 19.9" x 22.5" x 36.5"
- **Weight:** 130 lbs (typical)

## Contact us for custom modifications

### For additional information contact:

Micro Systems, Inc.  
35 Hill Ave  
Fort Walton Beach, FL 32547  
PH: 1-888-325-9422  
FAX: 1-850-243-1378  
www.gomicrosystems.com



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