World-class Defense & Aerospace Solutions for Telemetry Data

The Parraid Telemetry and Data Systems (TDS) division provides world-class aerospace system solutions for telemetry receiving, processing, recording, archiving, and data mining for Government and industry clients on six continents. TDS developed the first PC-based telemetry data processor more than 25 years ago. Since then, the TDS offering has grown to include the most feature-rich ground-based data processing and recording systems in the world for use in all data processing applications. Our current capabilities and products include:

**IMUX G2 Data Recorder/Reproducer**

IMUX G2 is an industry-leading IRIG 106 Chapter 10 compliant data recorder and reproducer. The system can be configured as a rack mount (2U & 4U) or portable unit. The IMUX G2 has many unique features, including multiple input and output types, the ability to record two Chapter 10 files simultaneously, and simultaneous playback. All units can be equipped with an optional integrated receiver, best source selection, bit synchronizer, and real-time processing and display capabilities.

**IMUX G3 NExT Recorder/Processing System**

Combining the functionality and maturity of the IMUX G2 product line with the global support and recognition of the Dell server provides the next generation of IMUX G3 Data Recording and Real-time Processing. All units can be integrated with an optional integrated receiver, best source selection, bit synchronizer, and real-time processing and display capability. OMEGA-NExT professional software provides comprehensive stream and parameter processing for all signal inputs and outputs.

**Best Source Selector/Best Data Engine (BDE)**

BDE provides an innovative and revolutionary method to dynamically blend all incoming data streams into one composite data stream for output or internal data processing. Parraid TDS provides high fidelity data by dynamically buffering all the sources arriving in the main mission control location and looking at each stream on a bit by bit basis. Our BDE then uses a bit voting algorithm to build a composite data stream from all the data streams during the entire mission. This effectively eliminates the errors from any one stream and any data loss from switching from one stream to another, providing the highest quality data output possible based on multiple data stream inputs.
Series 5000 and X-5000 Data Processors

The Series 5000 telemetry hardware platform is a fifth generation architecture leveraging more than 25 years of experience and thousands of mission-critical telemetry systems delivered worldwide. Based on a Commercial-off-the-Shelf (COTS) open architecture, the Series 5000 delivers unprecedented speed, configurability, and precision.

Series X-5000 is a small dual stream data processor that can be rack mounted (1U) or portable (1.75” x 12” x 7”). The X-5000 has its own embedded processor and Real Time Operating System (RTOS), which provides Ethernet communication for setup and data transfer to a host PC. Multiple X-5000 systems can be synchronized together with an external 10 MHz clock and Ethernet hub to provide more PCM streams to the host computer for processing and display.

OMEGA NExT Real Time Data Processing Software

OMEGA NExT provides EU conversion, data distribution, real-time display, and Chapter 10 compliant data archiving as one of the most powerful and easy-to-use telemetry data processing software applications ever produced. Developed during the past few years with the latest software development tools, OMEGA NExT provides unparalleled software stability and performance.

OMEGA Data Environment (ODE)

ODE is a post test data mining software tool that leverages search engine technology to allow the user to visualize large data sets quickly, search all data published to ODE, display heterogeneous types of data on one screen, provide restricted access to data, export time slices or whole data sets to other formats, and attach descriptive metadata to data sets.

RF Receivers and Combiners

RF Receivers and Combiners come in several different form factors: rack mount (1U, 2U, 4U w/ touchscreen), lunch box, RF brick w/ battery pack, and table top. All are capable of L, S, and C-Band operation and provide popular demodulation techniques.

“All-in-One” TM Ground Station

This ‘All-in-One’ Station can be configured with Receiver/Combiner, Best Source Selector, Bit Synchronizer/Decom, Real-time Processing/Display, and post data analysis software.