

WDP

Wideband Data Processor

KRATOS | RT LOGIC



Overview

The Kratos RT Logic Wideband Data Processor (WDP) is a highly reliable real-time data processing and IP transport system that supports single channel data rates to 6.4 Gbps. The WDP transports wideband serial data over IP networks, while maintaining very tight channel-to-channel correlation and faithfully reproducing data at the destination node. Standard IP network support for the WDP includes UDP, TCP, Pragmatic General Multicast (PGM), and Multicast IP protocols. The WDP is also customizable to support user-defined packet formats.

Application

Software defined mission data processing algorithms are easily integrated into the WDP. Kratos RT Logic offers a host of algorithms for digital data processing, including CCSDS data processing, Frame Synchronization, Rate Buffering, Viterbi and Reed-Solomon Decoding, and Autonomous Bit Error Rate Measurement.

Architecture

Wideband mission data recording in real-time using state-of-the-art commercial high-performance RAID storage arrays is available as an optional integrated feature of the WDP. The flexible server-based architecture of the WDP maximizes channel density and scalability while supporting your choice of peripherals. The WDP seamlessly integrates with commercially available Network Interface boards to support various network layers, including copper and fiber optic networks for IP protocols. The WDP is customizable to meet your specific requirements.

Key Features

- Up to 6.4 Gbps per Channel
- Dozens of Processing Algorithms Supported
- Simultaneous Record and Playback
- Store and Forward/Rate Buffering
- Maintains Precise Time-Data Correlation
- Selectable Network Data Transport (TCP, UDP, Multi-Cast, PGM)
- High-Availability Platform
- Hot-Swappable Power Supplies and RAID Media
- Integrates with Commercial Network Attached Storage (NAS) and Storage Area Networks (SAN)