



Cortex Radio Telemetry Receiver (RTR)

- Up to 40 Mbit/s bit rate (SOQPSK)
- Single or dual channels P/L/S band (fully independent)
- Single or dual 70 MHz IF inputs
- IRIG 106 compliant
- Excellent phase noise compatible with TIER II modulations
- Compact design

Based on the popular, field-proven Cortex architecture, Zodiac Data Systems is pleased to introduce the Cortex RTR, our latest COTS integrated telemetry receiver.

Thanks to its intuitive front end, the Cortex RTR provides user-friendly configuration and management of dual-channel wideband transmissions in P, L, and S bands, complete with TIER II compatible phase noise and an outstanding 110 dB dynamic range linear AGC.

The FPGA-based architecture offers versatile and reliable digital processing such as IF filtering, optimal pre-D and post-D combinations, multimode demodulations, bit and frame synchronizers and FEC decoders. The RTR provides a lasting, flexible solution through simple, user-designed on-site software upgrades and long-term provision for supporting higher bit rates, new demodulations and more. In addition, spare PCI slots may be used for any future hardware upgrades.

The Cortex RTR is acclaimed worldwide as the most advanced digital telemetry, all-in-one receiver solution, minimizing size and

cabling interfaces while maximizing versatility and performance.

ZDS RTR





Radio Signal Recorder/ Reproducer (RSR)

- True IF 70 MHz recording/ reproducing
- Individual signal selection for optimized recording performance
- Up to 40 MHz per IF channel recording bandwidth
- 3 IF inputs
- Less than 5 ns cross-channel synchronization
- Virtually no degradation (<0.2 dB at 25 Mbps PCM-FM)
- Intuitive GUI-based touch screen navigation
- IRIG106 Chapter 10 compliant

Zodiac Data Systems is pleased to introduce the IN-SNEC Radio Signal Recorder/ Reproducer (RSR). The RSR offers multi-channel Intermediate Frequency (IF) analog signal recording, high-fidelity reproducing, and the additional capability to record IRIG-B, AGC, PCM, and analog baseband data types.

The RSR records at an IF of up to 70 MHz to ensure outstanding cross-channel synchronization and accuracy. In this environment, the 70 MHz signal is directly sampled without any analog transposition, resulting in virtually no signal degradation. At the maximum signal bandwidth of 40 MHz per channel, the RSR provides recording capacity of 2 hours. This dual use solution has a modular platform, allowing for field proven versatility and scalability,

ideal for flight test and SIGINT type applications.

ZDS RSR





Modular Data Acquisition Systems

The DATaRec 4 Series is available in two distinct physical configurations that provide an extremely versatile ability to cover multiple applications, from high channel count data acquisition in a laboratory through airborne avionics and sensor monitoring in severe environments. The [DATaRec 4](#) is designed for use in benign and human compatible environments experienced in research, transport, laboratory test/evaluation and general industrial applications. The [DATaRec 4R](#) comprises the same electronics and facilities as the DATaRec 4, with added rugged features such as more robust housings and mounting capabilities, enhanced cooling and multi-pin connectors.

DATaRec 4R

- Ruggedized, Airborne and Non-Benign Environment Data Acquisition Solution
- User-friendly GUI-based Set Up and Monitoring Interface
- IRIG106 Chapter 10 compatible

- Scalable system with optional physical distribution of signal interface module

DATaRec 4

- Ground-based Data Acquisition & Replay Solution
- User-friendly GUI-based Set Up and Monitoring Interface
- IRIG106 Chapter 10 compatible
- Scalable system with optional physical distribution of signal interface module
- From low to very high channel capacity

