RX-1
COMPACT TELEMETRY RECEIVER

Zodiac Data Systems RX-1 is the small-size dual channel telemetry receiver with pre-D combiner that covers all IRIG frequency bands and all IRIG-specified modulations. This COTS product is based on the Cortex RTR technology bricks and inherits the well-recognized RF performance and signal processing capability. The RX-1 fits particularly the test ranges conditions and provides the most advanced features to maximize data availability.
**ANALOG FRONT-END**

**RF Input Signals**
- RF Inputs: 2 (N-type 50 Ω)
- Input Frequency Range:
  - S-band 2180 – 2485 MHz
  - L-band 1710 – 1850 & 1429 – 1545 MHz
  - P-band 200 – 500 MHz
  - C-IF-band 300 – 1150 MHz
  - C-band 4400 – 5250 MHz
- Dynamic Range: > -10 dBm to noise threshold
- Noise Figure: < 9 dB (6 dB typ.)
- Spurious Signal Rejection: > 60 dBc
- VSWR: < 2 : 1

**IF Inputs / Outputs**
- IF Inputs: 3 (RSR interface)
- IF Outputs: 2 @ 70 MHz

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**SIGNAL PROCESSING SPECIFICATIONS**

**Modulations**
- All, i.e. PCM-FM, SOQPSK & Multi-H-CPM

**Equalized Outputs**
- Video, PCM & Ethernet

**Performance**
- Market-acclaimed error-free telemetry on taxi way, on parking, & before launch for missiles / launch vehicles

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**MONITORING & CONTROL**

**Local Control**
- 3 front panel displays & Direct access keys

**Local GUI**
- Menus on local display

**Extended GUI**
- Through a KVM – seamless GUI than Cortex RTR

**Remote Control**
- Through TCP-IP – seamless GUI than Cortex RTR

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**ENVIRONMENT**

**Chassis**
- Rackable, 19", 1U, 508 mm (20")

**Weight**
- < 10kg

**Operating Temperature**
- 0°C to +50°C

**Storage Temperature**
- -40°C to +70°C

**Power Supply**
- 100-240 VAC, 50-60 Hz

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**VARIANTS**

**Baseline**
- RX-1 Dual channel, P/C-IF/L/S-band, AM, PCM-FM, MSFM, SOQPSK, MHCMP & Bit Synchronizer

**Additional Band**
- C-band

**CCSDS Package**
- PM, BPSK, QPSK, Viterbi, Reed-Solomon & Turbo codes

**Additional Modulations**
- STC

**Additional FEC**
- LDPC

**Additional Features**
- Equalizer EQ+, DQE/DQM...

**Additional Interfacing**
- Frame Sync, Ethernet ch18...

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**EQ+ ADAPTIVE EQUALIZER**

**Modulations**
- All, i.e. PCM-FM, SOQPSK & Multi-H-CPM

**Equalized Outputs**
- Video, PCM & Ethernet

**Performance**
- Market-acclaimed error-free telemetry on taxi way, on parking, & before launch for missiles / launch vehicles