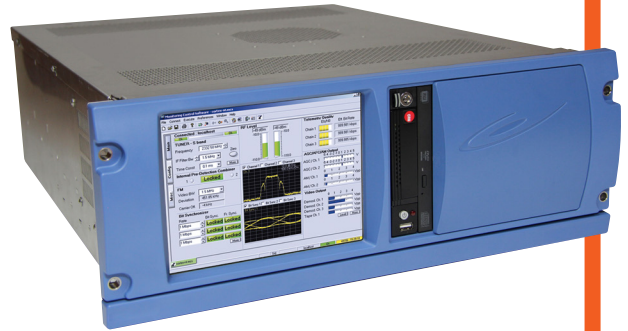




RTR

Radio Telemetry Receiver for range and industrial testing



TELEMETRY GROUND SOLUTIONS



Safran Data Systems' RTR is the **worldwide acclaimed COTS telemetry receiver**. The latest release strengthens its position as the **most advanced digital telemetry receiver** on the market, while keeping the well-recognized **RF performance** and **signal processing capability**.

Based on the Cortex architecture, the 4U chassis-based RTR can support **up to four channels** providing **the utmost flexibility and capability** a Telemetry Receiver can achieve.

Not only the RTR provides a **rich set of features** for different frequency bands, modulations, decoders and output formats, but the user can **easily upgrade the equipment in the field** to access additional and new features.

The RTR fits particularly the flight tests ranges where **a full flexibility and access to settings** is needed, through its easy-to-use intuitive GUI on the embedded 8,4" screen.



Launch Vehicle Telemetry



Missile Testing



Fixed & Rotary Wing

SINGLE, DUAL, QUAD

Full Flexibility of Configurations

EQ+

Adaptive Equalizer for all Modulations, on Video and PCM Outputs

8.4" SCREEN

Intuitive GUI, Keyboard and Trackball for Full and Easy Direct Control

DQM/DQE

Embedded Data Quality Metrics / Encapsulation compatible with BSS

CH.10 OUTPUT

Easy and Modern UDP Data Spreading

> ANALOG FRONT-END

RF Input Signals

RF Inputs Up to 4 (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 Up to 4 @ 70 MHz
 IF Outputs Up to 6 (RSR interface)

> SIGNAL PROCESSING

IF Filtering

Analog Filters 8 pre-selection SAW (500 kHz to 40 MHz)
 Digital Filters 30 FIR IF (3 kHz to 40 MHz)
 Phase Noise Compliant to IRIG 106 Tier II

AGC

Modes Automatic / Manual / Freeze
 Time Constants 5 steps, 0,1 to 1000 ms

Tracking

Demodulation AM

Telemetry

Demodulation PCM-FM, MSFM, SQPSK, Multi-h CPM
 PCM-PM, BPSK, QPSK, OQPSK, AUQPSK, Subcarriers,
 Advanced Demodulation Space Time Coding (STC), COFDM
 Diversity Polarisation, Space & Frequency
 Combiner Pre-D and Post-D
 Pre-D with optimal ratio or best source selection
 Pre-D gain up to 2.5 dB
 Baseband Filtering 17 digital filters (12.5 kHz to 20 MHz)
 De-emphasis CCIR 405-1 (525 or 625 lines)
 Error Correction Viterbi, Reed-Solomon, Turbocodes & LDPC

Bit Synchronizer

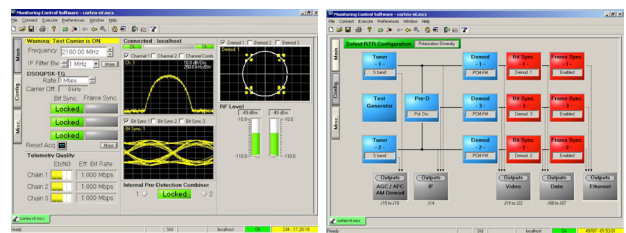
Output Format RS422 and/or TTL
 PCM Codes NRZ-L/M/S, BP-L/M/S, DM-M/S, differential, RNRZ-L
 Maximum Bit Rates 30 Mbps in PCM/FM
 60 Mbps in SQPSK
 45 Mbps in Multi-h CPM

> EQ+ ADAPTIVE EQUALIZER

Modulations All, i.e. PCM-FM, SQPSK & 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

> MONITORING & CONTROL

Local Control 8,4" screen, keyboard and trackball
 GUI Intuitive & fully customizable
 Remote Control Same GUI, thru TCP-IP



> ENVIRONMENT

Chassis Rackable, 19", 4U, 550 mm (21")
 Weight <25kg
 Operating Temperature +10°C to +50°C
 Storage Temperature -40°C to +70°C
 Power Supply 100-240 VAC, 50-60 Hz

> VARIANTS

Baseline RTR-NeXt Single/Dual/Quad channel
 S-band, AM, PCM-FM & Bit Synchronizer
 Additional Band P-band, C-IF band, L band, C-band
 Additional Demodulation SQPSK, MH-CPM, PM, BPSK, QPSK,
 STC, COFDM, Subcarriers...
 Additional FEC Viterbi, Reed-Solomon, Turbocodes & LDPC
 Additional Features Equalizer EQ+, DQE/DQM...
 Additional Interfacing Frame Sync, Ethernet ch10...

GLOBAL SALES

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