AEROSPACE TESTING TELEMETRY
Ground Products

DATA SYSTEMS
As a world leader in telemetry, Safran Data Systems is the only provider offering the entire datalink from data acquisition to decommutation and display.

ON GROUND, SAFRAN DATA SYSTEMS PORTFOLIO IS MADE OF COTS PRODUCTS THAT CAN BE TAILORED TO MEET SPECIFIC MISSION REQUIREMENTS:
- From RF to Decommutation & Display
- Telemetry Trackers
- Telemetry Receivers & RF to PCM Recorders
- Any Architecture (Ethernet, PCM)

LAUNCH VEHICLE TElemetry
Real mission constraints call for highest data availability

MILITARY RANGES & FLIGHT TESTING
Highest tracking robustness for very fast airframes

COMMERCIAL AIRCRAFT & HELICOPTER TESTING
Benefit from the best-in class multipath mitigation solutions thanks to EQ+
There is no 1-size-fits-all

Complete product range to fill your needs

FROM VERY SHORT RANGE SATURATED SIGNALS TO HORIZON FADED TRANSMISSIONS, MEET EVERY CHALLENGE WITH A SAFRAN DATA SYSTEMS TRACKING ANTENNA.
L/S/C Tracking Antennas

The only market-available L, S and C-band comprehensive antenna portfolio

Concerned with C-band migration?

SAFRAN DATA SYSTEMS ENSURES ITS CUSTOMERS THE UTMOST UPGRADABILITY AND FLEXIBILITY IN BASELINING ITS L/S/C TRI-BAND CONCENTRIC FEED ON ALL SPARTE SERIES.

Being proposed in any configurations, the tri-band feed allows field upgrade in any telemetry frequency bands while keeping cost under control.

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<tr>
<th>MODEL</th>
<th>COMTRACK</th>
<th>SPARTE SERIES</th>
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<tr>
<td>DIAMETER</td>
<td>Passive phase array</td>
<td>1.8 - 3.0m</td>
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<tr>
<td>RF BANDS</td>
<td>Mono / Dual</td>
<td>Mono / Dual / Tri</td>
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</tbody>
</table>
Flight test profiles may change
Be mobile and make any of Safran Data Systems tracking antenna an easily transportable/relocatable asset.

Transport as a commodity
Tow, Deploy, Repeat

COMTRACK
SPARTE M SERIES
Enabling relocation

SPARTE S SERIES

Going at sea

X SERIES SHIPBORNE
Telemetry receivers

Safran Data Systems receivers rely on state-of-the-art technology to deliver best-in-class solutions

- Adopted by all world test ranges
- Future-ready with in-the-field upgrade-ability
- Most efficient & reliable receiver on the market
Facing any reality coping with any transmission

- Powerful Forward Error Correction (LDPC)
- Market leading Adaptive Equalizer for multiplath mitigation
- Porkupine effect cancellation thanks to STC (Space Time Coding) and XTD (eXtended Time Diversity)

Any signal

- Any IRIG frequency band and modulation
- Other standards: CCSDS waveforms and COFDM
- Network-distributed data (UDP CH10) as well as legacy interfaces
Securely record your precious data

**RECORDERS**
Safran Data System's recorders increase the robustness and resiliency of your ground segment and offer replay capabilities for post processing and ground station pre-flight validation.

**RF OR BASEBAND RECORDING**
- RF signals, 70 MHz
- Wideband analog, PCM, AGC

**EASY REPLAY**
- For ground recorded signals
- On-board Safran Data Systems MDR recorded signals

**CHAPTER 7 TO CHAPTER 10 CONVERSION**
Telemetry & real-time data aggregation

BSS (Best Source Selector)

- Selection of the best signals out of up to 8 antennas
- Seamless switch between the different sources, in real time
- Selection Based Metrics: DQE/ DQM
- Eye Diagram opening
- Eb/No

FROM TELEMETRY TO INFORMATION

© Fotolia, Björn Professional
Displaying data that makes sense, using Advantys

Decommutation, processing, display and distribution

- Real-time and Post processing
- Engineering units conversion
- Data display
- Storage

Seamless importation of Safran Data Systems airborne DAU (XMA) configuration files thanks to eZ software suite.

GROUND PROCESSING OF CHAPTER 10 AND MORE
Better dealing with only one

SARAN DATA SYSTEMS
THE ONLY TELEMETRY FULL SYSTEM PROVIDER

While supplying each and every part and equipment for telemetry, Safran Data Systems also bring the expertise of delivering a complete turnkey solution.

THE EXPERT OF GROUND SOLUTIONS
Complete ground station: antennas, receivers, recorders, data processing, equipped racks, shelters...

THE EXPERT OF AIRBORNE DATA ACQUISITION
Complete system: airborne acquisition and recording solutions, transmitters, configuration software...
Safran Data Systems offers a comprehensive range of telemetry solutions from on-board products (data acquisition systems, transmitters) to ground station equipment allowing to design a turnkey data link systems.

Embedding mission specific capabilities within COTS products, Safran Data Systems solutions will be tailored to your requirement and ensure the robustness of your datalink whatever is the supported mobile (missile, launch vehicle, aircraft or helicopter).

Safran Data Systems is in the position to meet all specific requests in the following fields:

**On-Board Equipment:**
- Telemetry for missiles, launch vehicles, aircraft and helicopters
- Flight termination systems (launchers and missiles)
- Microwave frequency measurement systems
- Land vehicle telemetry

**Ground Stations:**
- Telemetry reception systems
- Flight termination transmitting station
- Remote sensing systems
- Satellite control stations