

# Satcom products

## Decimator Spectrum Analyzer



The Decimator Spectrum Analyzer product line remotely monitors communication signals anywhere RF signal monitoring is required. They are ideal for measurement of communications and broadcast carriers.

### Key features

- Available in three form factors: multiport (4/8 port), PCIe card and portable
- Frequency range—Decimator D4: 5 MHz to 6.5GHz
- Up to eight user-selectable input ports
- MPEG transport stream based digital demodulation and constellation display (D4 only)
- Powerful web-based user interface
- Cross-pol and carrier monitoring applications built-in

### Enhanced Decimator carrier monitoring software add-ons

- View up to 100 carriers in a single window with Spectator add-on
- Monitor demodulated signal characteristics with Detector add-on
- Manage multiple Decimators on a single screen with Illuminator add-on
- Analyze interference with the Carrier under Carrier add-on

## Transporter Digitizer



The Calian Transporter Digitizer excels in converting analog signals into digital packets, enabling the streaming of satellite signals globally. Unlock a world of possibilities with the Transporter's versatile applications such as virtualization, digitalization, site diversity, security, monitoring, and recording.

### Key features

- Accepts signals from 450 MHz to 4.0 GHz
- Multiple channels up to 500 MHz instantaneous bandwidth
- HTML5 interface and REST API available



## Gemini satellite modulator



The Calian Gemini modulator supports full-featured DVB-S/S2 and turbo functionality. With both ASI and IP data inputs and both IF and L-band outputs, Gemini provides flexibility and full support for IP-based content.

### Key features

- Support for DVB-S/S2 and Turbo
- MODCODs from QPSK through 32APSK
- Roll-off factors as low as 5%
- Symbol rates up to 45 Msps
- L-band output (950 – 1750 MHz)
- IF output (70/140 MHz)
- 2 ASI inputs
- 2 gigabit ethernet IP data ports
- Signal monitor output
- 10 MHz frequency reference
- Low phase noise
- Great spurious performance
- Web-based user interface
- Integration with network management systems via SNMP
- Front panel LCD display

## Hercules multi-channel modulator



The Calian Hercules satellite modulator supports full-featured DVB-S/S2 and turbo and can generate up to 16 independent 30 Msps carriers in the 950 MHz to 1750 MHz band. All carriers are frequency agile and have individual control of power, symbol rate, FEC rate and roll-off. Hercules is flexible in supporting multiple operational modes and includes the ability to generate a single carrier up to 416 Msps.

### Key features

- Support for DVB-S/S2 and turbo
- MODCODs from QPSK through 32APSK
- License-based approach, pay for only the number of channels you need
- L-band output (950 – 1750 MHz)
- Symbol rates up to 416 Msps
- 2 Gigabit ethernet input ports
- 10 GB SFP+ input data port
- Excellent RF performance
- Significant savings in CAPEX and OPEX costs due to the architecture, reduced rack space, lower HVAC costs, and significantly reduced power consumption



## Itus—Intelligent redundancy switch



The L-band intelligent redundancy switch is used to provide 1:1 modulator redundancy protection. The switch has two power supplies for high reliability and includes an innovative smart-switching feature based on the incoming DVB-S/S2 signals. Itus can also be deployed independently as a transmit signal monitoring device.

### Key features

- 1:1 modulator redundancy protection
- Manual or automatic switch-over
- Frequency range of 950 – 2150 MHz
- Fast switching times
- Dual redundant power supplies
- Compatible with Calian modulators and other alarm-contacted based modems and modulators
- Standby and online monitor outputs
- Web-based user interface
- Smart signal quality monitoring of incoming DVB-S/S2 signals and switching based on the demod/decode lock status, MER, power level and frame error rates

## Carrier monitoring systems

The Calian Carrier and Spectrum Monitoring Systems provide satellite operators, teleport operators and other service providers the ability to automatically manage RF carrier performance with minimal effort and cost. We provide three carrier monitoring solutions with differing capabilities depending on your needs:

### Dedicated carrier monitoring systems

- Provides comprehensive monitoring capabilities across one or more satellites
- Multiple ground stations and beams can be easily supported
- Provides centralized monitoring and control from a satellite network control center

### Mon-A-Co integrated system

- Adds carrier monitoring capabilities for existing and new users of our Mon-A-Co product

### Decimator carrier monitoring

- Remote spectrum analysis and carrier monitoring via both Internet and API integration.

