Calian, Advanced Technologies Earth Observation Ground Station solution addresses today’s needs in high-performance data reception and TT&C. Calian is a leader in ground station design and implementation, and we’ve taken another step forward by bundling industry-leading COTS hardware with new station management functions provided by our Mon-A-Co system.

This highly autonomous, turnkey ground station design incorporates powerful new features to our proven Mon-A-Co monitor and control system. A system scheduler allows the station to be tasked via input data for seamless multi-mission and multi-satellite pass support. The data-driven approach allows selectable automated pre/post pass activities for truly un-manned “lights out” operations, thereby minimizing operating costs.

The integrated RF to baseband reception chain is modular, providing low-cost flexibility in selecting the redundancy, diagnostic and test features that are right for your application. The system is already designed to accommodate S-band TT&C, simply by selecting this option.

Features:
- Autonomous “lights out” operation.
- RF to baseband solution using industry leading COTS hardware.
- Multi-satellite, multi-mission.
- S/X/Ka-band, dual polarization.
- Full-motion, 3-Axis antenna.
- Optional S-band TT&C chain.
- Supports advanced bandwidth efficient modulation techniques.
- Antenna apertures selected to suit your application.
- Local/remote monitor and control.
- Automated test capabilities.
- Vendor agnostic, we select the best vendor for the application.
The ground station architecture makes it possible to operate the station locally via the user interface, or remotely via WAN. RF electronics are housed in the antenna structure to minimize losses.

A fibre optic interface transports the signals from the antenna to the equipment room—simplifying the IFL design.

At the output interface, EO data is available in a number of computer-compatible formats, as well as standard electrical signal output formats.