Satellite Telemetry, Ranging, and Commanding
Next-Gen Software Radio on a High-Availability Server
Connected to a High-Performance Signal Converter via Digital IF

- **Economical and Trusted** - satTRAC is AMERGINT’s game-changing Modem/Baseband Unit (BBU) for telemetry, ranging, and commanding. Since 2011, satTRAC’s mature hardware and software framework has been successfully deployed on vital commercial, civil, and DoD satellite programs.

- **Proven Compatibility and Performance** - With demonstrated compatibility in satellite factories and on-orbit, satTRAC provides a low-risk, long-term ground station solution.

- **Full Cycle Support** - satTRAC is designed explicitly to achieve a long life-cycle and low maintenance costs. AMERGINT’s team of dedicated experts provides up-front guidance on how best to leverage the innovative features of satTRAC. Later, during sustainment, AMERGINT’s Technology Refresh Program™ (TRP) ensures painless and economical transitions of operating systems, server platforms, and security policies.

- **Software Performance is Better** - Leveraging high-availability servers with pure software signal processing enables floating-point accuracy and yields excellent BER performance.

- **Customer Configurable User Experience** - Get up to speed quickly with satTRAC’s configurable Graphical User Interface (GUI). Hide what you don’t need and emphasize the key parameters to streamline operations.

- **No Export License Required** - Recent U.S. Policy change allows AMERGINT to export satTRAC without a license.

- **Expanded Features and Tools** - The AMERGINT satTRAC Modem/BBU provides more than just a high-performance, economical alternative to the legacy generation of products. satTRAC upgrades your ground station with many built-in, cost-saving capabilities:
  - Published Open Interfaces
  - Auto-Generated Documentation and Diagrams
  - Full-time Spectrum Analyzer
  - Built-in Testing with Auto-Generated Reports
  - Optional Integrated Recorder, FEP, and Network Gateway
  - Legacy Modem/BBU Interface Emulation
  - Security Hardened Linux Operating System
  - Channel Emulator

Join the Rapidly Growing List of AMERGINT Customers Revolutionizing the Satellite Ground Station
Software and Hardware:
AMERGINT’s architecture is based on generic and interchangeable hardware. The functionality of satTRAC is defined by the software application. Many independently verified applications may be hosted on a single satTRAC Modem/BBU. With this design, you pay for, integrate, and test only what you need. Mix and match whole applications or just the parts you need for your ground station.

Software Applications (see individual data sheets for details):

**Group1** – TLM, RNG, and CMD for FS-1300, LS-1300, GEOStar2, GEOStar3, Eurostar 2000/3000, Spacebus 2000/3000 and similar satellites

**SatSim1** – Satellite transponder simulation for FS-1300, LS-1300, GEOStar2, GEOStar3, Eurostar 2000/3000, and Spacebus 2000/3000 satellites

**Group2** – TLM, RNG, and CMD for 702, 601, A2100 and similar satellites

**SatSim2** – Satellite transponder simulation for 702, 601, and A2100 satellites

* **SGLS** – TLM, RNG, and CMD for the Space-Ground Link System

* **TDRSS** – TLM, RNG, and CMD for the Tracking and Data Relay Satellite System

**AFSCN** – TLM, RNG, and CMD for Air Force Satellite Control Network missions

**C2V2** – TLM and CMD for International Space Station Visiting Vehicles

**USB** – TLM, RNG and CMD for traditional STDN USB satellites

**Direct1** – TLM and CMD for direct carrier modulations

* This application is ITAR-controlled

Hardware Platforms:
AMERGINT’s software applications run on a high-availability, commercial off-the-shelf server that connects to signal converters via Digital IF over Ethernet. Digital IF separates the processing from the signal interfaces enabling more efficient ground station architectures.

**satTRAC Server**
Dual-redundant, hot-swap power supplies and disk drives. Servers from Dell, HP, and other vendors are supported.

**satTRAC 70 Signal Converter**
70 MHz to/from Ethernet Digital IF

**satTRAC SL Signal Converter**
S/L-Band to/from Ethernet Digital IF

satTRAC is the Game Changing Choice in Satellite Telemetry, Ranging, and Commanding