

Telemetry 508+ - Network Interface System

RT Logic's second generation Telemetry™ 508+ is now available. The T508+ is used to connect satellite control centers with their ground antenna networks such as the Air Force Satellite Control Network (AFSCN). The second generation T508+ offers new capabilities such as antenna pointing angle generation, contact logging, and a built-in RGF/telemetry simulator.

The new T508+ uses a PowerPC-based architecture running VxWorks. This combination provides a high availability platform with true real time (deterministic) processing. A Windows-based GUI supports the T508+. Both single contact and dual contact configurations are packaged in a 3.5" rack mount chassis.



Paul Thoreson, RT Logic's Space Business Development Manager, commented "RT Logic has been delivering AFSCN interface systems for more than four years. The current release of the T508+ provides more capability than competing products in half the footprint. Plus, the second generation T508+ can easily support non-AFSCN networks such as USN™ and DataLynx™."

"We've maintained backward compatibility for customers using the T508+ in AIM™ compatibility mode," noted Barry Krueger, T508+ Product Manager. "With this new release, TT&C systems can take advantage of C++ client software interfaces to monitor and control both the T508+ and the remote ground facility. The T508+ provides ADCCP directive formatting and status message parsing rather than simply passing messages straight-through."

In addition to a sophisticated software interface, the second generation T508+ provides new functionality. A contact archiver logs messages and events associated with a contact. The T508+ has the ability to generate and automatically send antenna pointing angles from a two-line mean element set. The T508+ also includes an RGF/Telemetry Simulator. In this mode, the T508+ not only emulates the AFSCN remote ground facility, but can also be used to generate/playback telemetry streams. The T508+ can be easily connected to satellite simulators. "Full contact simulation is an important capability we have added to provide full support for training and rehearsal activities," stated Paul Thoreson.

The T508+ supports multiple command interfaces (ternary, di-bit, network) for both command and command echo processing and is compatible with Elwell, Mykotronx, and KI-17 KG devices. The AFSCN C/C/S interfaces that use the ADCCP protocol are fully supported. The T508+ directly provides multiple telemetry interfaces allowing it to perform polarity inversion/format conversion and to generate clocked telemetry data streams from network interfaces/stored files. A rack I/O panel is provided with the T508+ to allow point-to-point connections to external KGs and communications equipment.

RT Logic is a leading provider of open architecture systems and products for satellite ground operations, satellite test activities, and launch vehicle/range telemetry acquisition. RT Logic's Telemetry 505 and Telemetry 70/70 complement the Telemetry 508+. For more information, please call (719) 598-2801, email: sales@rtlogic.com, or check out www.rtlogic.com.