Finally, a powerful way to analyze receiver/demodulator mission dynamics!
Introducing the Quasonix RDMS Status Logger—View receiver/demodulator metrics in a real-time graphics display and log status to file. The Status Logger now integrates Ethernet (HTTP) control of the RDMS Rack Mount Telemetry Receiver using the Quasonix API.

Available RDMS Status Logger Configurations
Two configurations are offered. The RDMS Status Logger system consists of a hardware interface, a PC or integrated controller, and application software. The hardware interface is housed in a 1U rack mount package or via a small Serial Interface Module.

- **Compact Status Logger**
  Logs status information from a single RDMS Rack Mount Telemetry Receiver, which includes two independent channels and the combiner channel.
  The Quasonix Status Logger application runs on an external PC, using a Serial Interface Module (SIM) to interface to the RDMS.

- **Rack Mount Status Logger with Integrated Controller**
  Supports 1, 2, 3, or 4 RDMS units, with the Status Logger application running on an internal controller.
  Stores status information on a removable media (SD card).
  A keyboard and monitor are connected to the logger to view the application software.

System Integration
System integration is a breeze. A single connection is made to the RDMS Rack Mount Telemetry Receiver from the interface hardware.
The RDMS™ Telemetry Receiver is continuously making measurements in the DSP heart of the system. These measurements are used to optimize receiver/demodulator performance, but many are not accessible to the user through the front panel. Even those that are displayed on the front panel, such as input power level and DQM, are instantaneous snapshots, and no historical record is created.

The RDMS™ Status Logger accesses these data, timestamps them, and logs them to a PC hard drive, enabling post-mission analysis. This analysis may offer powerful insight into the telemetry behavior over the course of the mission.

**Available Logged Metrics**
- **Data Quality Metric**
- **BER** (if a PN pattern is transmitted, such as for telemetry test flights)
- **Input Power Level** (AGC)
- **Bit Rate**
- **Estimated Eb/N0**
- **Automatic Frequency Control**
  - Estimated Offset
  - Compensated Offset
  - Acquisition Statistics
- **Timing Loop Statistics**
- **Trellis Run Length Statistic**
- **Mod Index Tracking** (PCM/FM Only)
  - Estimated
  - Compensated
  - Acquisition Statistics
- **PCM Frame Detection** (If a known frame header is present and unencrypted)
- **Equalizer Health**
- **Combiner Statistics**
  - Offset Frequency
  - Timing Offset
- **STC Mode**
  - Top/Bottom Magnitudes
  - Delay Offset
  - Frequency Offset
  - Clock Error (Bit Rate Error)
  - Trellis Metric

Additionally, the RDMS™ Status Logger captures the configured state of the receiver both pre- and post-logging. The configuration information includes details such as loop parameters, selected IF filter, selected baseband filter, AFC and AGC parameters, modulation index tracking parameters, equalizer parameters, etc. These data can be used by the customer to compile mission statistics, and document the state of the receiver. The logged data provides Quasonix (if the customer contributes the data) a complete picture of the receiver state and the dynamic environment to assist in product development and integration issues.

The Status Logger now integrates Ethernet (HTTP) control of the RDMS Receiver using the Quasonix API. This interface is useful for checking configuration, or setting the RDMS parameters remotely using a lightweight network interface.

The RDMS™ Status Logger records a measurement approximately once per second.
Written and supported by Quasonix, the RDMS™ Status Logger application software provides intuitive set up and logger management. The logger writes data to the hard drive in .csv format for easy import into analysis software such as MATLAB or Excel.

The standalone version requires no external PC AND automatically connects to a detected Rack Mount RDMS™ receiver. The Standalone RDMS™ Status Logger has a front panel SD card slot and USB port for easy access to logged information.

Two RDMS™ Status Logger Systems Available

**Status Logger with Integrated Controller**
- No external PC required
- Log status to SD card

**Compact Status Logger**
- USB Interface
- 25 pin RDMS cable
- Compact size

**RDMS™ Status Logger System**
- Cable connect Status Logger to RDMS™ Receiver
- Connect monitor and keyboard
- View status with graphical user interface
With razor-sharp focus on the aeronautical telemetry market and a team rich in talent, experience, and sheer determination, Quasonix is able to consistently design, develop and manufacture what our customers regard as market-leading telemetry products.

Quasonix is...Reinventing Telemetry™