

## Remote UMTS Access Enables Remote Monitoring for Water Treatment Plant

CHESTERLAND, OH – May 9, 2011

A leading manufacturer of water treatment equipment for treating cooling water, boiler water, process water and pure water uses their equipment to process water treatment that is often installed in trailers or in containers and is then rented out for temporary water treatment assignments. For these non-stationary applications, the customer requires an advanced data logging system equipped with remote access to read both live data and stored data. The customer's objective here is to gain convenient, permanent access to the remote treatment system and to closely monitor the equipment's performance. Additionally, as a form of insurance while renting out equipment, the customer needs to receive instant alarm notifications whenever system performance is degrading.



CAS DataLoggers recommended and installed a **Delphin TopMessage data logging system** with Ethernet interface and direct PC connection (P2P), along with a **MoRoS UMTS router**, placing both inside the rental trailer. With the TopMessage system connected by LAN to the UMTS router, the customer can access the remotely-located truck at any time. Additionally, the customer installs **ProfiSignal Basic**, a modular development system for generating applications, onto a control room PC to provide measurement acquisition, control and test data as well as functions for archiving, analysis, operation and monitoring.

The TopMessage device records 12 analog and 8 digital signals onto 1GB of local memory, so the customer can use the analog inputs for RTD sensors, thermocouples, voltage or 4-20mA signals for acquiring any physical measurements. This system uses Delphin ADVT and DIOT modules and also features fast and reliable signal processing for only a few thermocouples up to thousands of measurement points spread over several wide areas. The installation of this unit now allows pressure, flow, temperature, and system errors from the process water treatment equipment to be monitored per the customer's needs. The TopMessage system itself is safe and secure on the truck within its industrial-grade enclosure. Another much-needed function of the TopMessage data logger is that the internal alarm and event channels perform continuous system monitoring, and report (through the UMTS wireless bridge) an immediate alarm notification to the central head office when threshold levels are violated. The functional design is presented below.

The installation of the Delphin TopMessage in combination with the UMTS router gave the customer instant online access to the truck's data using their control room PC. The plant's manager now also has remote access to live data from the process water treatment unit for permanent process supervision. Setup time for this solution was at a minimum due to easy connection of the analog sensors and digital status inputs. Additionally, the customer has independent access to the TopMessage system where it is installed, and also has the alarm notification they need in case of problems and abnormal process status. There's no need to have a PC installed along with the remote system, as the TopMessage device takes over all monitoring and control functions of the treatment equipment.

If the customer needs additional reporting and automation, the optional **ProfiSignal Klicks** software offers components for custom-made reports and parameter input screens as well as the Klicks automation language. For more information on the **Delphin TopMessage data logging system** or for further remote monitoring solutions, contact a Solution Analyst at **(800)-956-4437** for recommendations specific to your application or visit [www.DataLoggerInc.com](http://www.DataLoggerInc.com).