

INDUSTRIAL REMOTE MONITORING SYSTEMS WITH LTE

PLANTS & FACTORIES CAN BENEFIT FROM INDEPENDENT DATA COLLECTION



Remote monitoring systems and data transmission have become a business-critical capability in many industries, especially in machine and plant engineering applications. To quickly implement these capabilities, Delphin Message or Expert Transient devices are commonly used for remote equipment monitoring due to their ability to perform:

- Independent data acquisition
- Data Recording
- Remote Monitoring of data
- Alarm notification via SMS text message
- Mathematical and statistical data processing

STANDALONE COLLECTION OF DATA

A LTE modem module enables remote devices to be accessed via a [VPN tunnel](#) making them fully independent of customer networks and providing a secure environment for configuration, monitoring and data transfer. Owing to this feature, Delphin systems can be remotely configured, while users can remotely access and automatically transmit their data using a scheduler with FTP. Additionally, if an alarm or failure occurs, these intelligent devices can automatically send emails or text messages in time to help prevent process delays or shutdowns.

Delphin ProfiSignal software is network-compatible to minimize configuration effort. ProfiSignal is a complete software system for data acquisition, analysis, visualization and automation. Users are provided with a clear and logical overview of all measurement systems: whether for single or multi-hundred channel applications.

Delphin Plant Application Features:

- Full functionality via LTE remote access
- Online access to all measurement data and status information
- Online alarm and fault notification via email and text messaging
- Automated offline data transmission at preset intervals via a scheduler

DELPHIN DEVICES

Delphin remote monitoring systems solve a variety of measurement and control problems in industrial applications. Delphin features different analog and digital I/O modules for use with a wide range of signal types including: voltage, 4-20 mA current, thermocouple, RTD, resistance, 24 volt discrete I/O, pulse and frequency.

These compact systems also offer powerful alarm and programming capabilities allowing them to process measurements and initiate actions on their own.



Delphin Message Series:

- [ProfiMessage Systems](#) are compact modular measurement, control and monitoring units. They see widespread use in the fields of process technology, test engineering, and research and development.

Delphin Expert Series:

- The [Expert Logger](#) is a compact high-accuracy data logging system. It is available in 4 different models with up to 46 analog and 24 digital channels plus 14 GB of on board storage. .The Expert Logger is perfect for remote data collection from machinery and equipment in plants or in the field. Typical applications include recording temperature, pressure, flow, voltage, current and force.
- The [Expert Vibro](#) is an extremely high-speed, vibration measurement system capable of synchronously acquiring up to 16 channels of vibration data at a sampling rate of 50 kHz per channel. An on-board DSP provide real-time FFT calculation of characteristic values including phase, frequency and amplitude with programmable limits. Typical applications include shaft vibration monitoring, bearing damage diagnostics, gear box analysis and combustion monitoring.
- The [Expert Transient](#) is an extremely high-speed, high-accuracy data acquisition system capable of synchronously acquiring and saving analog measurement data up to a sampling rate of 50 kHz per channel in combination with digital signals. The Expert Transient is ideal for fault diagnostics in machinery and plants. Typical applications include the evaluation of pressure pulses/surges, fast process monitoring and controller optimization, shock and vibration measurement, and materials research.

THE DATA ACQUISITION EXPERTS

CAS DataLoggers is a distributor of data loggers and data acquisition equipment. We sell directly to end users and also work through a network of distributors and resellers throughout the U.S., Canada, Central and South America.

We have been in business for over 20 years, and actively involved in selling data loggers and real-time systems since 2001. Our staff has over 100 years of total experience with different types of data acquisition and test and measurement equipment. Our Inside Engineering department can also provide value-added services including on-site installation, wiring and packaging, engineering services, and turn-key systems.

For more information on [Delphin Data Acquisition Systems](#), remote monitoring systems or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.