

IoT DATA LOGGING WITH EXPERT DEVICES

FLEXIBLE SOLUTIONS WITH POWERFUL ANALYSIS SOFTWARE



Developers of manufacturing equipment and test stands have demanding requirements for data acquisition systems. The data acquisition solutions must be accurate, reliable and flexible. The expected communication capabilities continue to grow with the available options provided by the Internet and cellular technology. Whether your equipment is stationary or mobile, today's users expect to have access to their data from the cloud or via the Internet. In addition, the configuration and analysis software must be easy to use but offer advanced features.

Plant engineers and machine manufacturers expect continuous access to the data from their devices from anywhere in the world. This means via the Internet. This data is important during the initial start-up phase, during a warranty period and for troubleshooting during anomalies.

[Delphin Technology](#) meets all these requirements with flexible IoT data logging solutions from their Expert Series data loggers and powerful Profisignal Software for analysis.

PRECISION DATA ACQUISITION

The Delphin Expert Series is comprised of the [Expert Logger](#), [Expert Vibro](#) and [Expert Transient](#). These devices allow for stand-alone data logging with fast sampling for any type of analog input sensor. Input types include voltage, current, Thermocouple, RTD and even IEPE accelerometers and microphones.

For those applications which require simultaneous sampling on each input channel at dynamic sample rates, the Expert Transient and Expert Vibro provide a cost-effective solution. These units have local internal data storage to ensure contiguous data even when connections to the cloud fail. Local intelligence allows for signal processing and fault prediction as the data is recorded.

In all the Expert devices, monitoring critical parameters are handled in the hardware without reliance on the remote software. Alarm notification is generated from the device via e-mail or digital outputs to local systems.

WIDE RANGE OF FIELD-LEVEL COMMUNICATIONS

Frequently, today's machines and systems are built using many different sub-systems. The monitoring/recording device must interface to analog sensors as well as various Fieldbuses and consolidate all the data. The Delphin Expert Devices provide a single, centralized data collection solution with a common time stamp. With [Profibus](#), MODbus RTU, TCP and CANbus, Delphin Expert devices can integrate with most popular installations.

OPC UA Client/Server interfaces are available options which further extend the connectivity and allow for the universal exchange of data at the field-level, meeting the requirements of Industry 4.0. Both measurement data and alarms conditions can be transmitted to other systems via OPC UA.

CLOUD CONNECTIONS FOR REMOTE ACCESS

An Expert Device can connect to the cloud or Internet to satisfy a wide range of applications. The Delphi DataService software can be run on a cloud-based server or within the local network. The device can connect to the server via wired LAN, WiFi or cellular LTE modem. Data can be stored on a cloud-based database to allow for access by multiple users from any location with a connection.

Alternatively, data can be pushed to remote users or locations using FTP or E-mail to allow for offline analysis – daily uploads let engineers process and analyze overnight performance data when they arrive at the office in the morning.

For more information on [Delphin Data Loggers](#), IoT data logging 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.