

## ADJUSTABLE HIGH-SPEED ACQUISITION FOR TEST AND SIMULATION

---

### PUMP TESTING APPLICATION BENEFITS FROM DELPHIN DATA LOGGERS



Pumps are required in diverse applications ranging from micro-dosage pumps in chemistry labs, standard pumps for gardens, all the way through to large-scale industrial or vacuum pumps. Each application has different test requirements, so users working in the pump sector greatly benefit from the flexibility and universal inputs of the Delphin Message and Expert Key devices. Adjustable sampling rates of up to 100 kHz enable users to perform high-speed acquisition inspections and testing. The hardware's dependability and the continuous, long-term archiving of data via the ProfiSignal software makes Delphin ideal for service-life testing, environmental simulation, and endurance testing.

#### **Delphin Measurement Features:**

- Universal inputs suitable for any type of sensor (e.g. mA, mV, RTD, thermocouples)
- Rotation speed measurement, vibration measurement, flows and pressures
- High-speed acquisition of up to 100k Samples/s
- Control functions via analog, digital and PWM outputs
- Monitoring of limit values and alarms in the event of faults

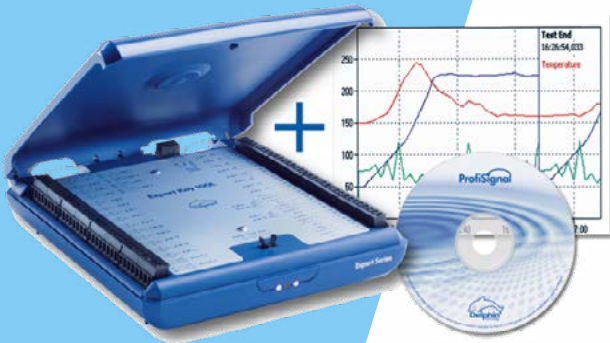
## CUSTOMER EXAMPLE

A manufacturer of hydraulic pumps has designed three test stands for testing during the developmental phases of 30 kW, 90 kW and 250 kW class pumps. This requires high-speed measurement data acquisition and evaluation. Many of their parameters require measuring at sampling rates of up to 100 kHz.

Personnel selected [Expert Key Model C devices](#) for installation within their switch cabinets. Delphin ProfiSignal Klicks automation software allows users to create systems to meet their specific testing and evaluation requirements. Office compatibility has been given a special priority. Only a few mouse clicks are required to extract measurement data in ASCII/xls format or as vector-based graphics for insertion into a Word report.

### Typical Areas of Application:

- Endurance trials
- Rotation speed monitoring via vibration measurement
- Determining characteristic operating curves
- Determining characteristic diagrams and pressure heads via volume flow rates
- No-load testing
- Heat testing
- Determining efficiency rates



## Delphin Solutions:

- [Expert Logger](#)—Stand-alone data logger
- [ProfiMessage](#)—Modular Measurement Technology
- [Expert Vibro](#)—Vibration Measurement

[Delphin](#) has decades of experience in measurement technology, with many systems optimized for high-precision temperature measurement. Delphin data acquisition systems are ideal for applications such as Machine Monitoring, Fault Diagnostics, Vibration Monitoring and more.

Analog inputs can be configured to any type of thermocouple or 4-wire RTD with all inputs galvanically-isolated 24-bit A/D converters and high-precision internal power sources for reference-current feeds. Users don't need any additional signal conditioning.

## VISUALIZATION SOFTWARE INCLUDED

Users can quickly and effectively operate the Expert devices using the powerful [ProfiSignal Go software](#). ProfiSignal is a flexible software platform supporting a wide variety of hardware and featuring powerful functionality for measurement, process automation, and communication capability. ProfiSignal also has drivers for many common software applications such as LabVIEW and DASylab.

ProfiSignal Go can be used to portray measurement data in trends and to carry out detailed analyses. The software also enables fast ASCII exporting of measurement data for MS Excel™ or for conversion into TDM format.

## THE DATA LOGGER EXPERTS

CAS Data Loggers 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. We have been in business for over 20 years, and actively involved in selling data loggers and real-time systems since 2001.

We want to help you select the most appropriate product for your application and we also provide technical support on all of our products. We also offer value-added services including on-site installation, wiring and packaging, engineering and design services, and turn-key systems.

---

For more information on [Delphin Data Loggers](#), high-speed acquisition 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](http://www.DataLoggerInc.com).