



NEW PRODUCT ANNOUNCEMENT

NEW 4-CHANNEL EV-4 EXPERT VIBRO FROM DELPHIN



CAS DataLoggers in partnership with [Delphin Technology](#) introduces a new model of the Expert Vibro data acquisition system, the 4 channel [EV-4](#). Designed for data acquisition and vibration analysis this system is especially suited for smaller applications that only require a few analog input channels. A key feature of the Expert Vibro family of is the ability to synchronously acquire multiple analog channels at sample rates up to 50 kHz.

The EV-4 can operate as a stand-alone device recording to internal memory to capture both transient and periodic data. Integrated comparators and digital inputs allow flexible triggering including the ability to record pre- and post-event data. The EV-4 is equipped with powerful [FPGA](#) technology with digital signal processing software that provides extensive on-board intelligence for calculations, logic, and vibration analysis. Measurement data is evaluated “on the fly” with digital outputs being switched within milliseconds in the event of limit value violations.

In addition to the 4 analog input channels, the EV-4 has 4 digital inputs to capture pulses, discrete inputs or digital triggers. An extension bus allows the system to be extended to over 100 analog or digital inputs with high-speed synchronization protocols.

KEY FEATURES:

- 24 Bit A/D for high resolution measurements
- Support for voltage, IEPE, or shaft vibration sensors

- 4 Analog outputs
- 8 Digital outputs
- Programmable anti-alias filtering
- Up to 14 GB of local non-volatile memory
- Support for USB, NFS, CIFS data storage and FTP/SFTP file transfer
- Gigabit Ethernet interface, optional 802.11 b/g/n WiFi
- RS-232, RS-485, CAN, MODBUS RTU, MODBUS TCP and PROFIBUS Interfaces

Of special benefit is the modular system for signal processing with a range of preprocessing functions including filters, rectifiers, integrators, differentiators or decimators which can be selected to make up a preprocessing sequence. Multiple preprocessing sequences are able to run in parallel in order to evaluate an input signal. In addition, a complement of standard FFT signal analysis functions are built in to the software to allow measurement of amplitude, frequency and phase of the primary frequency or harmonics, extraction of characteristic values including min/max/average/peak to peak/RMS, vector sum and crest factor.

Data captured by the EV-4 can be displayed on a PC using Delphin's [ProfiSignal software](#). Even large volumes of historical data are easy to analyze – Profisignal has been optimized to enable large data volumes to be easily processed online. For on-line applications live data can be streamed to a PC via a GB Ethernet or WiFi interface and data recorded in the device's internal storage can be easily downloaded and analyzed offline. An optional Vibro analysis module for Profisignal allows display of common frequency related charts including FFT, cascade/waterfall, time signal, spectrogram and orbit diagrams.



The Delphin Expert Vibro is designed especially for applications that require high speed acquisition of periodic vibration signals including:

- Shaft vibration monitoring and analysis
- Machine and housing vibrations
- Combustion chamber vibration monitoring
- Gear box analysis
- Roller bearing monitoring and bearing damage diagnostics
- Mobile vibration measurement
- Air gap monitoring

For more information on the new [Delphin EV-4](#), or to find the ideal solution for your application-specific needs, contact a CAS Data Logger Applications Specialist at **(800) 956-4437** or visit our website at www.DataLoggerInc.com.