KEYNES CONTROLS

CE

Data Acquisition Solutions

Contact Keynes controls: E-mail: sales@keynes-controls.com

AquaLOG

Updated 10/7/2012

Data Communications & Logger Interface

AquaLOG Data Recorder & Communications Interface

1 x SDI-12 Port v1.03 with enhanced ID No. Support

Immersion Proof Enclosure

Switched Power/Alarm Outlets

GPRS / Wi-Fi modem remote access support

Optional - USB Flash Memory Support

256 x 8000/ 64 x 32000 Data Table Options

Terminal Configuration - No software drivers required

Supports full SDI-12 V1.3

Advanced Power management

Mathematical Formulae Support

EZi-Log Web Data Interface.

Specifications

Real time clock accuracy	Temperature Compensated > ± 1 min /Yr
Internal Data Storage Procedure	Spreadsheet format table User selectable 250 x 8000 rows (Standard) 64 x 32000 rows (small)
Recording Modes	Single Shot Circular Buffer High Speed on Alarm Detection
USB Flash memory storage	To 16 GB storage
Alarm Outputs	4 x Switched outputs 6 x Alarm trigger options
Switched Modem Excitation	Reset / Power off modem When not in use
Power Supply	8 - 18 V DC
Current Drain	2 mA active 30 uA standby 4 mA Analogue Scan 20 mA Vibrating Wire Scan
Physical Dimensions	165 x 58 x 28 mm Excluding mounting tabs
Network Support	VHF/UHF Radio Modem Spread Spectrum Radio Satellite Modem GPRS / Wi-Fi Modem
Communications Ports Options	1 x SDI-12 Port V1.03 Real-time display USB memory expansion 1 - 16 GB
Protected Inputs	Gas discharge for SDI-12 network ports
Case	Immersion proof - safe from local spray. dust & sand.
Dimensions (mm)	L =260 W = 127 D = 38
Data Processing	User defined formulae

Operation

The AquaLOG is a general purpose low cost data recorder and communication interface for use with intelligent SDI-12 network sensors.

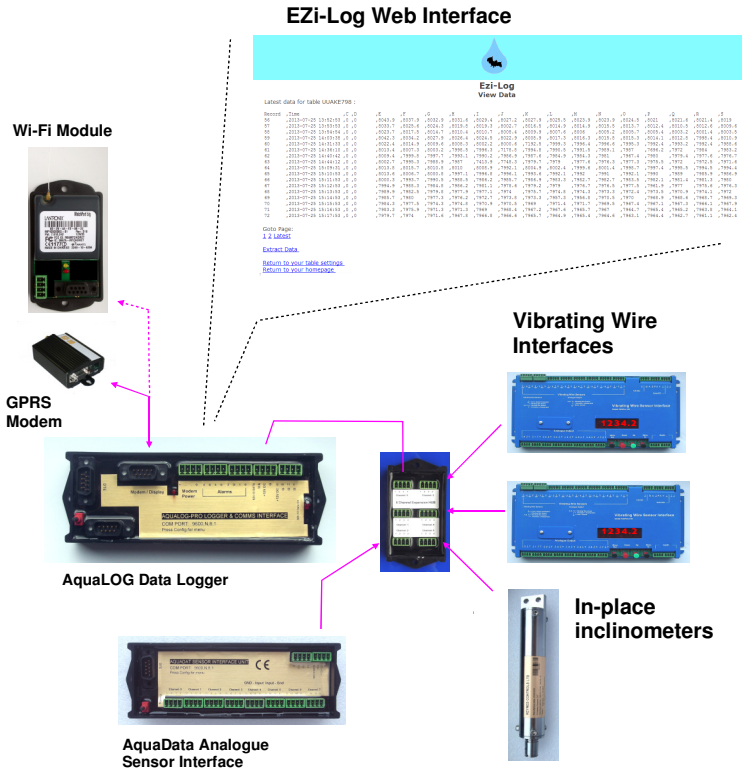
The device can operate stand-alone, or when part of a larger system used to communicate data over the GPRS mobile / Wi-Fi cable free networks onto the EZi-Log data server on the Internet.

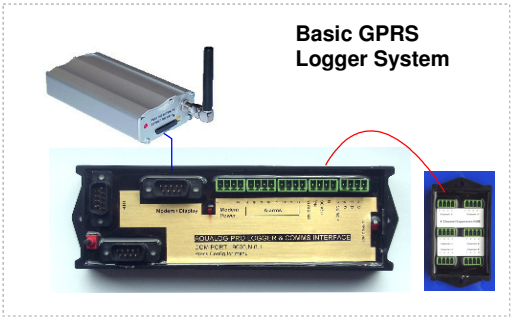
The AquaLog unit is supplied in a dust proof, moisture proof enclosure.

The AquaLOG is a general purpose data logger and communications interface that has been designed for remote, stand-alone applications. The device is supplied in an immersion proof enclosure. Two User set memory models 64 x 32000 rows or 256 x 8000 rows for large number of sensor applications

The AquaLOG uses a simple in-built menu system to give the User access to configuration options. All sensor data is stored into a spreadsheet format data table in order to make recording applications simple to understand.

Acts a stand-alone logger unit or interface to the Keynes Controls EZi-Log Web Interface.

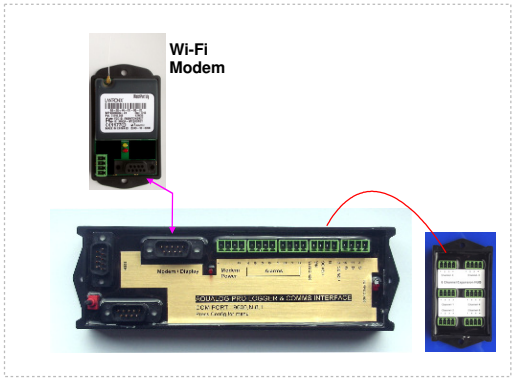


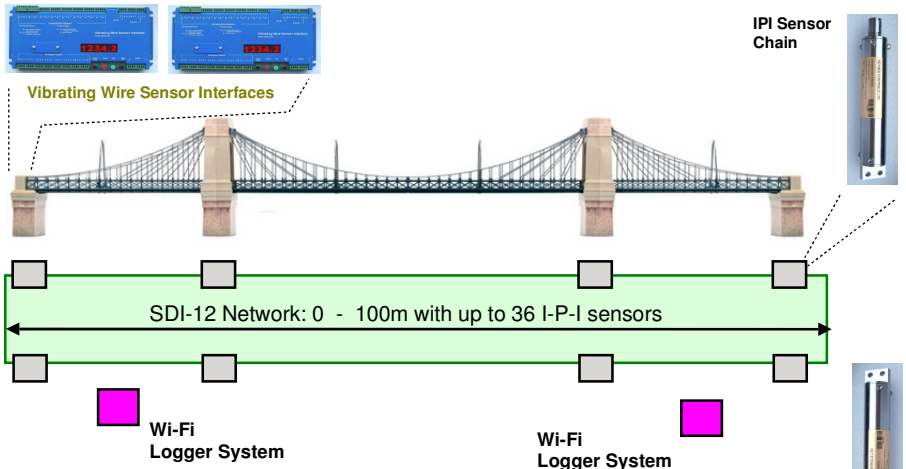


The basic GPRS Logger system communicates data to the EZi-Log system via a mobile phone GPRS mobile phone network.

The AquaLOG data logger and communications interface undertakes all of the power management functions including the power cycling of the modem when it is not required.

Data is recorded locally and transmitted at a set time onto the EZi-Log Web reporting system.





Basic Stand-alone Wi-Fi Logger System

The image above shows the basic components used to create a stand-alone Wi-Fi systems interface enabling a wide range of sensors to communicate cable free. The AquaLOG interface provides all systems power management functions and data recording. The EZi-Log Web interface is used to examine and report data.

Measurements can be made at pre-set times and uploaded across a Wi-Fi network to a server. This device operates on any industry standard Wi-Fi network.

User Formulae

The AquaLOG supports User defined formulae for local data processing of recorded information. This useful for applications such as those using vibrating wire sensors so that the sensor data can be converted directly into engineering units

Wi-Fi Modem

The Wi-Fi modem operates across any standard Wi-Fi network and makes cable free sensor measurements a very easy operation. See data directly on a laptop or PC.

Wi-Fi Modem

GPRS-Modem

The GPRS modem uses standard mobile phone network SIMM's for communication to the data server across the Internet.

Wi-Fi Switch

Local Area Network

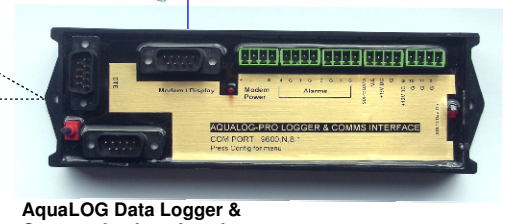
Terminal Port Configuration

The AquaLOG is configured using the in-built VT100 format terminal menu system to set the configuration operations.

There are no driver software required for this product

GPRS Modem

Standard mobile phone SIMM



AquaLOG Data Logger & Communications Interface

The AquaLOG data recorder is fully integrated to the Keynes Controls EZi-Log Web based data recording system.

The EZi-Log Web software enables data from remote monitoring systems to be accessed on demand by a User using any device supporting Internet access via a Web browser.

Mobile Phone GPRS Network

APN

Access Point

Internet

Automatic Data Reports

The EZi-Log software can be set to forward data from the data server at pre-set times to assigned E-mail addresses.

Further information see

http://www.aquabat.net/downloads/EZi-Logv5-marketing.pdf

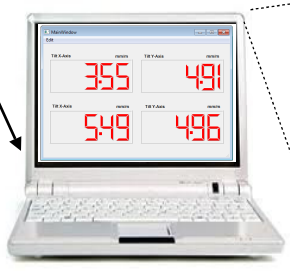
Data Access

Automatic data reporting can be undertaken using the GPRS mobile phone, or a local Wi-Fi networks. The EZi-Log interface offers common User environment for data access regardless to the network being used.

Data can be downloaded manually from the device, without any requirement for a network at any time.

For systems built shipped by Keynes Controls a mixture of network types can be supported and the data presented from a single data table. The User does not require to know how this is carried out. Details supplied on request.

Web - Data Report



EZi-Log Web Interface