HAWKEYE 2i/s TECHNICAL SPECIFICATION

SYSTEM SPECIFICATIONS

Hazardous area approval	ATEX and IECEx certification for Explosive Gas Atmospheres, ATEX SIRA 12ATEX2013X IECEx SIR 12.0004X
System	Single enclosure and remote sensors
Unit dimensions	Height 300mm, Depth 150mm, Width 160mm (200mm with sensors connectors fitted)

POWER SUPPLY

Battery pack	3.9v lithium-thionyl chloride battery pack
Battery life	More than three years @ 15 minute logging interval + limited number of alarms
Battery change	Field replaceable power pack, fitted with two x 3.9v lithium-thionyl chloride packs.

INPUTS/OUTPUTS

Sensor Inputs x2	Model	I/O
	HE2 i/s - AD	1 x Analogue 4 -20mA input, 1 x SDI Digital Input (4 volt)
	HE2 i/s - AA	2 x Analogue 4-20mA input
	HE2 i/s - DD	2 x SDI Digital Input (4 volt)
Digital Output X1	- S	Optical isolated Digital out –

DATA LOGGER

Memory capacity	15 months at 15 minute logging interval
Memory type	Non-volatile
Storage	Rotating Store
Firmware	Remote Flash upgradeable
Real Time Clock	Crystal Controlled
Logging Intervals available	1,2,5,15,30, 60 minutes.
Enviromental Protection	IP68, Double Protection Sealing
Connectors	C16 - Industrial Plastic Connector

COMMUNICATIONS

Remote communication	Inbuilt quad-band GPRS, GSM modem
Antenna options	High gain in-chamber or external, Patch, Dipole or Cross- Yargi.
Protocols supported	DNP3, MODBUS ASCII.
Direct communication	RS232 on site via cable

FEATURES

System information	Battery voltage GPRS / GSM signal strength
Alarms	4 user configurable level alarms per channel + Low battery alarm
Designed to integrate to telemetry /SCADA systems	Non proprietary communication protocols DNP3, MODBUS ASCII Front End Communication Server Options WEB based Data Management Solutions

SENSOR SPECIFICATIONS

Intelligent Ultrasonic Sensor

Measurement range	0.3 – 6 metres (0.3 – 3 and 0.3 -10 meter options)
Accuracy	+/- 0.25% for MAX measurement span or 6mm (whichever is greater)
Resolution	+/- 0.1% or 2mm (whichever is greater)
Beam angle	10° +/- 2°
Temperature compensation	Temperature compensated output to (+/- 0.5°C accuracy)
Process connection	Universal 1.5" or 2" BSP / NPT thread
Sensor cable length	10 metres as standard (longer lengths on request)
Environmental	IP68

Pressure Sensor

Measurement range	Determined by sensor ordered – ranges from 350 mBar to 70 Bar available
Accuracy	+/- 0.2% FS BSL
Temperature compensation	Temperature compensated output
Overpressure	6x FS
Sensor cable length	5 metres as standard (longer lengths on request)
Environmental	IP68
Approved Sensor/Devices	SeSys CSO camera Screen cleaning trigger

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HAWKEYE has been developed with the Isodaq data logging technology embedded,
and has been jointly developed with Hydrologic Limited.

ISODAQ TECHNOLOGY

IETG

HAWKEYE

Join the Sewer Monitoring
REVOLUTION

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HAWKEYE was launched in 2004 and is the proven and unequalled solution designed to reduce pollution incidents and improve management of sewerage networks.

Water companies across the UK and Europe have been enjoying the benefits of the HAWKEYE system, which has grown to play a fundamental role in their waste water/CSO monitoring programmes, helping them to mitigate pollution incidents and improve sewer management.

HAWKEYE now incorporates the experience of monitoring thousands of sewer sites as well as valuable feedback from our clients. The redesigned HAWKEYE is now available through IETG as either a fully integrated brand new monitoring system or a system upgrade. When you choose HAWKEYE you have peace of mind that you are partnering with true experts in sewer and CSO monitoring who have a wealth of industry-related experience and skills.

Isn't it time you joined the sewer monitoring revolution?

What Difference Can HAWKEYE Make to Your Business?

- No 'civils' work required, for power or communications
- Proven solution for improved compliance
- Rapid resolution of potential pollution incidents
- Fast and direct communication between HAWKEYE and your company's systems
- Reduction in CSO pollution and DG5 flooding incidents
- Improved sewer management
- Accurate results through advanced ultrasonic and pressure sensor technology
- Reduced 'whole life costs' low maintenance

HAWKEYE - The Technology

HAWKEYE is designed specifically for monitoring the performance of sewer networks and Combined Sewer Overflows (CSOs) and is suitable for water and sewerage networks worldwide. Through a process of continuous improvement, HAWKEYE has developed to provide a fully integrated sewer level monitoring solution. When a unit detects an incident it automatically sends an alarm to the client's system via GPRS, GSM (CSD) to enable rapid resolution.

HAWKEYE can be programmed to interface with most top-end telemetry and SCADA systems via their native communication protocols.

New HawkEye 2i/s features

- Intrinsic Safety Certification - ATEX and IECEx
- Custom designed enclosure, double layer IP68 protection
- Dual Channel Logging, 2 inputs + 1 output.
- Wider choice of sensors- Industry standard I/O, Analogue and Digital Sensor interface options
- Integrated antenna for below ground use, external antennas available
- Extended battery life via internal and external battery pack options
- Fully featured DNP3 communications protocol
- GPRS / CSD wireless modem capability
- External Status LED, Power On/off and Dial-out buttons.
- Device Trigger port (Sampler / CSO Camera / Screen Cleaner)

Upgrade your System to HAWKEYE

If you've already installed HAWKEYE across your network it is easy to upgrade to the 2i/s so that you can experience the full benefits of the enhanced system. Contact us to discuss the equipment upgrades required for your particular system and you can leave the rest to us.

Ongoing Support from IETG

At IETG we have over 25 years experience and knowledge working with water and sewerage systems. Our teams of experts will provide you with ongoing support from installation and commissioning of your HAWKEYE system through to planned preventative and reactive maintenance programmes along with technical advisory services.

From the moment you choose HAWKEYE we will work closely with you to ensure that your network installation is rolled out to achieve maximum performance and results for your business.

As a HAWKEYE user you have access to data that allows you to see what is happening in your sewerage system, and the range of services and software products available from IETG enable our clients to deploy the complete solution, making data readily visible across their organisation.

Preserving the Environment

HAWKEYE plays a fundamental role in helping to preserve our natural environment. Through careful and precise CSO monitoring technology, HAWKEYE is designed to help water companies mitigate CSO pollution incidents thereby lessening the damage and negative impacts caused to our natural environment. Commitment to environmental preservation and sustainability are at the top of today's agenda and HAWKEYE provides water companies with a proven and unequalled solution.