

# IntelliSense

# Vision Series

IntelliSense is a new concept in the measurement of specific parameters in process applications.

By converting an analogue sensor input to a digital signal, the IntelliSense provides auto sensor recognition that eliminates drifting potential and allows travel of up to 300 metres. Each of the five available sensory heads is colour coded and measures a multitude of variables.



## Conductivity

A conductivity sensor, for use in cooling tower and boiler applications, solids control and ensuring maximum water-saving cycles, is indicated by a light grey colour.

## Toroidal

A toroidal conductivity sensor is indicated by a dark grey colour. Toroidal provides a broad, accurate measurement, and is used in tough process applications where dirt and scale can be a problem, like metal finishing and wastewater.

## pH

Blue indicates a pH sensor which is used to adjust acid or caustic feed in cooling tower, boiler, swimming pool and wastewater applications.

## Redox

Indicated by red, a Redox sensor is used for monitoring oxidizers such as chlorine, bromine and hydrogen peroxide for multiple applications.

## Multipurpose (MPIO)

Orange indicates a 4-20 mA input and output, dry contact and/or hall effect, or an ion specific sensor. This can be used for water meter initiated feed, proportional dosing and/or monitoring and control of chlorine dioxide, chlorine, bromine or ozone.

## Features

- USB or RS-422 connection
- An infrared port allows calibration data to be transmitted to the IntelliSense from the IntelliScan
- The service light indicates scheduled calibration, cleaning or probe replacement
- The power light indicates the IntelliSense is connected to the process control instrument
- The alarm light provides indication of IntelliSense malfunction
- The IP56 enclosure makes this unit suitable for use in rugged environments
- The din connector and twist lock allows for quick and easy assembly of the probe and the IntelliSense

# IntelliSense Specifications

Enclosure	Impact resistant ABS plastic with IP56 protection
Power requirements	Via USB or RS 422 cable MPIO <sup>2</sup> is USB only
Power Indicator	Standard
Alarm Indicator	Standard
Scheduled Service Indicator	Standard
USB/RS-422 Inputs/Outputs	One
Conductivity Scale	0 – 20000 µS/cm
Toroidal Conductivity Scale	500 – 200000 µS/cm
pH Scale	0 – 14
Redox Scale	± 2000mV
Chlorine Dioxide Scale <sup>1</sup>	0 – 2 mg/litre
Front Panel H/O/A Control	Standard
Analogue Inputs	One (MPIO <sup>2</sup> only)
Analogue Outputs	One (MPIO <sup>2</sup> only)
Contact Inputs	One (MPIO <sup>2</sup> only)
Contact Outputs	One (MPIO <sup>2</sup> only)
Accuracy – at point of measurement, excluding probe	± 1% of full scale
Environment	-17.8 – 50°C 100% Humidity
Dimensions (mm)	11.43 x 20.32 x 5.72
Shipping Weight (kg)	.26

- 1 Ion specific sensors require the use of an MPIO and count as a multipurpose and general sensor IntelliSense input.
- 2 MPIO is the abbreviation for Multipurpose IntelliSense.

For full technical details of the family of components described, refer to the relevant data sheet specific to that product.

See separate Application Sheet for details regarding the selection and installation of the UniVision product range.

## Other Vision Series Products



**UniVision** - A single system process control instrument, designed to handle virtually all common cooling, boiler and process water treatment applications. Available in only one model, it is supplied in a standard format with popular features, many of which are automatically activated.

As standard, it is supplied with two IntelliSense connections allowing for the use of one multipurpose IntelliSense input/output and one general sensor IntelliSense (conductivity, toroidal, pH, or Redox), four selectable relays, one alarm relay, three taggable timers, one flow switch input and one input suitable for use with dry contact or hall effect water meters.



**LiquiVision** - A dual system process control instrument, designed to handle many types of applications. Available in only one model, it is completely modular and comes standard with popular features, many of which are automatically activated.

The LiquiVision controller is supplied in a standard format with popular features comes with three IntelliSense connections (allowing for the use of three general sensor inputs, two general sensor inputs and one multipurpose input/output or one general sensor input and two multipurpose inputs/ outputs), four selectable relays, one alarm relay, six taggable timers, two flow switch inputs and two inputs suitable for use with dry contact or hall effect water meters.

The capability of the LiquiVision controller can be maximised to allow it to handle up to two multipurpose IntelliSense inputs/outputs and any combination of up to four conductivity, toroidal, pH or ORP (general sensors) IntelliSense inputs through the use of a USB expansion hub and up to eight selectable relays through the use of a relay expansion box.

**Relay Expansion Box** - Used to add four additional relays to a LiquiVision. A maximum of one relay expansion box can be used with the LiquiVision and will require the use of one USB input.

**USB Expansion Hub** - For use with the LiquiVision controller only to maximise the number of USB inputs/outputs. The USB expansion hub is required if more than three USB inputs/outputs are to be used with a LiquiVision. A maximum of one USB expansion hub can be used with the LiquiVision.

The USB expansion hub cannot be used with the UniVision Controller.



**IntelliScan** - A handheld device that revolutionises the calibration process by eliminating the need for manual data entry. It has an infrared port that allows calibration data to be transmitted to the IntelliSense from the IntelliScan. The unit is supplied with its own convenient carrying case and belt-clip attachment.