



## iseries i02

**Product code:** iseries i02

**Manufacturer:** City Technology

City Technology resets the size standard for gas sensing technology as the iseries demonstrates a significant reduction in size from previous sensing technology.

This revolutionary design also simplifies target-gas access to the sensor face and features an option for a replaceable external membrane. With an extended operating life of five years and extended temperature and humidity range, iseries sensors are also designed to meet over multiple performance standards, including ANSI/ISA 92.00.01-2010, BS EN 45544-1:2015, and AS/NZS 4641-2007.

**Digital interface:** the sensor has a UART protocol to communicate with the instrument with chip select option.

**Interchangeable:** all intelligent sensors have the same dimensions and communication protocol. All sensors in the range will work with a supply voltage from 3.1 V to 3.3 V.

**Digital traceability:** sensors contain the following data: serial number, manufacturing date, and gas type for quick and easy identification of the sensor.

**OEM lock:** sensors have two levels of lock codes. The first one is an OEM specific code programmed in during manufacture and cannot be modified. This lock code is provided by the OEM. Instrument can check if the sensor has the unique code - if not the instrument can refuse the sensor. The second level of lock code is left blank and can be updated by OEM/Partners during sensor integration into the instrument as needed.

**Pre-calibrated:** sensors will be calibrated during

manufacturing and calibration data is written in the sensor. Sensor will output gas concentration when interrogated by instrument.

Predictive calibration; sensors can predict in advance when its accuracy is becoming too poor to give a reliable, accurate reading (advanced warning of when recalibration is needed).

End-of-life indication: sensors can predict in advance when its sensitivity is falling too low to give a reliable, accurate reading (advanced warning for sensor replacement).

Fault indication: intelligent sensors can detect several internal faults like open circuit sensing/high impedance electrode, drift/fault in reference electrode, electrolyte concentration out of range, counter electrode fault; therefore notifying the user to take corrective actions.

Enhanced specifications: engineered with an operating life of five years, the iseries excels in challenging and extended temperature and humidity extremes

Surface mount spring contacts: no PCB through holes to maximize sensor mounting flexibility

<b>Life expectancy</b>	5 years
<b>Measurement range</b>	0% to 25% vol. O2
<b>Target Gas</b>	Oxygen
<b>Response Time</b>	< 15 seconds (T90)
<b>Output</b>	UART