

City News

Autumn 2003

Quality Gas Sensors



Welcome...

Firstly very special thanks to everyone who visited us at Sensors 2003 show in Nuremburg and joined with us in the start of the **MICRO Revolution**. The show was the most successful yet and the attendance and interest levels for City's complete range of gas sensors set new records.

New Products: We are pleased to announce the launch of DiveceL^{®3} and DO2 new Diving Gas Sensors targeted primarily at the diving apparatus markets - see inside for more details.

City Team: We are pleased to announce a new appointment within our Technical Sales Support Team; this will undoubtedly strengthen and increase our level of global support for our customers (more enclosed).

See City: City will be exhibiting at Miconex 2003 in Shanghai PR China – Sept 16-19 (more details inside).

Do enjoy this edition of City News and let me take this opportunity to thank you for your most valued business and continued interest in our products.

Thank you



Brian Roake - Sales and Marketing Director

Visit our
website
www.citytech.com



Sensors 2003

Back in May, City Technology launched it's new revolutionary product – the MICROpeL[™] – a miniature combustible gas sensor (more information on the MICROpeL[™] inside) at the Sensors 2003 show in Nuremburg.



The 3-day event included City organising a MICROpeL[™] Launch Cocktail Party along with various technical presentations from our Research and Development team.

City would like to take this opportunity to say a special thank you to all of our customers who visited our stand and came along to support the launch of our new MICROpeL[™].

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- Customer Services

Unsere deutsche website - www.de.citytech.com

OVER
25
YEARS

OF QUALITY AND
INNOVATION



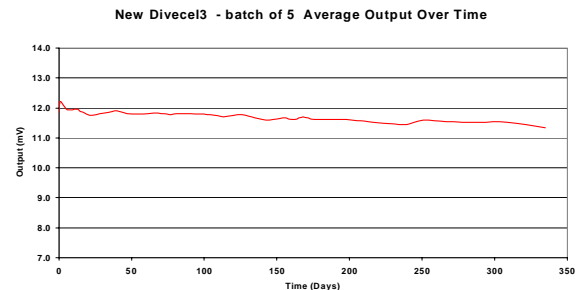
DIVING



Diving Sensors Just Got Even Better

City Technology's range of partial pressure electrochemical oxygen diving sensors, DiveceL[®]3 and DO2 have undergone some improvements.

These two sensors, ideally suited for measuring equipment used to check the oxygen concentration of Nitrox tanks used for diving, have benefited from a change to the construction, which drastically improves their long-term signal stability and mechanical shock resistance. The chart shows typical stability over time from sensors we have been monitoring over the last year.



When introduced, the sensors will also be given a new identity and be moulded in bright yellow ABS, a colour already familiar to the diving world for it's high visibility.



New sensors will be available later this year. Please contact us for further information or samples.

For more information please contact Nicola Nye on +44 23 9228 8146 or sensors@citytech.co.uk



The Revolutionary MICROpeL™ - 75% Smaller Than All Existing Pellistors

The MICROpeL™ is the new catalytic bead gas sensor (pellistor) for combustible gas detection from City Technology. This is the first sensor to be introduced from the new MICROceL™ range of small, flat sensors, with measurements of 17 mm square and 4mm high and an overall weight of no more than 2g. The MICROpeL™ is one of the most radical new designs for gas sensors for many years.



Not only is the size of this product revolutionary but also the way it is connected to the PCB is yet another innovative idea! The pellistor comes with its own connector rather than having to use the conventional pins and sockets! The MICROpeL™ connector is compatible with surface mount technology and can be soldered directly onto a PCB.



For more information please contact Nicola Nye on +44 23 9228 8146 or sensors@citytech.co.uk





Visit City Technology at MICONEX 2003

Ever since its conception in 1989, the Miconex (Multinational Instrumentation Conference and Exhibition) Show has been the major showcase for the control and instrumentation industry in China. This year the show takes place in Shanghai and is organised by the China Instrument and Control Society. This is City's third time at the show, each year the show goes from strength to strength with the organiser's reporting over 450 Chinese and 100 foreign exhibitors with some 35,000 visitors at Miconex 2002, which was held in Beijing. The show also enjoys wide support from local and central government sectors.

The show runs from 16th –19th September 2003 and City Technology Limited can be located in the International Hall, Booth C34.

We look forward to seeing you there!!!!

For more information please contact Nicola Nye on +44 23 9228 8146 or sensors@citytech.co.uk



CUSTOMER SERVICES

Here To Help!



Commitment, integrity and our ability proactively to serve your organisation's needs, helps differentiate City Technology from other suppliers. We aim to demonstrate our commitment, flexibility, excellent service and care when dealing with all our customers.

The Customer Services Team is here to help you. If you have a specific requirement for the administration for your orders that could make life easier – let us know!

Each of our customers is assigned a dedicated customer support team, including a Customer Services Representative – responsible for understanding your business, responding immediately to your requirements and making sure you get the products, services and support you need, when you need them and where you need them.

We encourage you to have direct and regular contact with your Customer Service Representative so that you always feel supported with the way in which your orders, quotes queries or concerns are progressing.

In all cases, we strive to provide a comprehensive after-sales service.

Please contact us:

Customer Services Representative	Email Address	Areas/Markets Covered (full listings of areas on website)
Sharon Rose	sharon.rose@citytech.co.uk	Safety East & MMOS
Agnes Marin	agnes.marin@citytech.co.uk	Safety West
Katja Sendig	katja.sendig@citytech.co.uk	Emissions & Far East
Matthew Barber	matthew.barber@citytech.co.uk	Medical, MMOS USA & Automotive

A full list of Customer Service and Technical Support Advisers contacts is available on our website – www.citytech.com

For more information please contact Jayne Bevis on +44 23 9228 8125 or jayne.bevis@citytech.co.uk



Chlorine Dioxide Measurement with a 7CLH CiTiceL®

Water authorities worldwide are increasingly looking for alternatives to using chlorine in water treatment. Chlorine dioxide is generally considered as a more effective sterilant and is becoming more widely used as an alternative to chlorine. As such we are finding increasing interest in the detection of this particular gas.

City Technology has examined the feasibility of detecting chlorine dioxide electrochemically. Theoretical calculations predict complete reduction of chlorine dioxide will readily occur in the acid medium of an electrochemical cell according to the following equation:



The performance of City Technology 7CLH chlorine sensors was tested for detecting ClO_2 . This sensor was chosen as the electrode material favours the reduction of chlorine dioxide. The sensors were found to respond readily to chlorine dioxide, with 10ppm ClO_2 output between 30.4 and 32.1 μA .

The conclusion drawn from this testing was the sensitivity of the 7CLH to chlorine dioxide is approximately 3.1 $\mu\text{A}/\text{ppm} \pm 25\%$. This is a reducing signal, i.e. the output has the same polarity as when responding to chlorine. The minimum output resolution of the 7CLH in a fixed monitoring application is 0.15 μA , corresponding to a chlorine dioxide concentration of approximately 0.05 ppm. Therefore with suitable precaution and signal processing, a chlorine dioxide monitor could be set to alarm at the STEL of 0.3 ppm chlorine dioxide.

Summary:

Sensor	Sensitivity to ClO_2	Sensitivity to Cl_2
7CLH	3.10 \pm 25% $\mu\text{A}/\text{ppm}$	1.0 \pm 0.25 $\mu\text{A}/\text{ppm}$

For more information on the 7CLH sensors to detect chlorine dioxide please contact Brett Littlefield on +44 23 9228 8139 or brett.littlefield@citytech.co.uk

New Addition To Technical Support Team

City has just strengthened the Technical Support Team with the appointment of Mark Miller as Applications Engineer – North America.

Mark has a degree in both electrical and mechanical engineering gained at the University of Kentucky. He has a strong engineering and technical support background having worked for IBM for 6 years and spent the last 11 years with a leading US company as a Development and Applications Engineer where he notably had field technical support and product development responsibilities for sensors and controls including infrared and electronics.

Mark is based in Lexington, Kentucky and will look after all the technical support responsibilities for the IRidium® infrared bench, Automotive NO and O_2 sensors and our MMOS products.

For more information on any of these articles please contact City Technology at:

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