

Pocking, 19 July 2021

CO₂ and CH₄ Gas Warning Systems for the University of Technology Sydney

MSR-Electronic's gas detectors monitor CO₂, CH₄ gases and O₂ deficiency in laboratory areas.

Centrally located, practice-oriented and innovative. The University of Technology Sydney is a public research university for engineering and natural science subjects as well as for the Business School sector. There are now over 40,000 students studying at UTS. The university is considered one of the world's leading young universities and is ranked 1st in Australia and 11th in the world in the QS World University Ranking 2021.



For the protection of people working and learning for example in the areas of natural science, such as biomedicine, chemistry, forensics, marine, physics or even biotechnology, a gas warning system from MSR-Electronic was installed to ensure the monitoring of combustible and toxic gases as well as of oxygen deficiency.

MSR-Electronic solution

Analog gas sensors (type MC2) are used for the laboratory environment, and PolyXeta®2 sensors, which are specially certified for the ATEX area, are used for the hazardous, explosive area in the gas cylinder warehouse.

Each level has its own controller and the corresponding sensors. An RS-485 Modbus interface is integrated in the controller (type DGC-06). The high-level interface with Modbus protocol transmits all sensor values, the relay status (ON or OFF) and also any system malfunction to the BMS on site in real time.

Analog gas sensor MC2



The sensor is used for the detection of toxic gases or for oxygen monitoring when a classic 4-20 mA signal (or 2-10 V) is required. The sensor includes a digitalised measured value processing, a temperature compensation and a self-monitoring. In addition to the electrochemical sensor element with measuring amplifier, the sensor head contains a module with μ Controller, an analog output and a power supply.

PolyXeta®2 gas sensor for ATEX area

The sensor is used in industrial areas like oil/gas industry, biogas plants, petrochemical industry, power plants etc. in Ex-Zone 1 (PX2-1) and/or 2 (PX2-2). The PolyXeta®2 sensor is also suitable for commercial areas like gas transfer stations etc. With the 4–20 mA / RS-485-Modbus output signal the sensor is suitable for connection to the PolyGuard®2 gas controller series by MSR-Electronic, as well as to any other controllers or automation devices. Optionally, the PolyXeta®2 sensor is also available with LCD display and relay output.



Gas-Controller-System DGC-06

The Controller is used for the monitoring and warning of toxic and combustible gases and vapours as



well as of Freon refrigerants within a wide range of the gas measurement technique.

Numerous adjustable parameters and set-points permit individual adaptation to many applications.

The DGC-06 Gas-Controller fulfils in addition the functions of monitoring carbon monoxide (CO) in garages, tunnels and cart tracks etc. and is compliant to the current EN 50545-1.

The entire support and installation of the MSR gas warning system in the University of Technology Sydney was carried out by the **MSR partner ALVI Technologies Pty Ltd**. ALVI distributes gas warning devices from MSR-Electronic in Australia, New Zealand and Southeast Asia.

Further information on **MSR products** can be found here in the current **MSR-Electronic online catalog** or in the webshop: **www.msr-24.com**.

MSR-Electronic is a manufacturer of fixed gas warning systems with decades of experience in the field of building automation and gas measurement technology. The international company with headquarters in Germany has a wide range of methods for the detection of toxic and combustible gases. On this basis MSR-Electronic develops individual gas sensors, controllers and warning devices for many applications, such as parking garages, tunnels, petrochemical industry or shipping. The products meet more than the general standards and regulations and can therefore guarantee the safety of the plant. **www.msr-electronic.de/en**

MSR-Electronic GmbH | Bürgermeister-Schönbauer-Str. 13 | 94060 Pocking, Germany | Tel.: +49 8531 9004-0

Product pictures copyright and title

Copyright Photograph Andy Roberts

Copyright MSR-Electronic GmbH, Germany, Gas Sensors

Copyright MSR-Electronic GmbH, Germany, Gas Controller

Contact: MSR-Group GmbH, Michaela Kosmella-Rauner, Bürgermeister-Schönbauer-Str. 13, 94060 Pocking, Germany
m.kr@msr-group.eu