



The **QRS SENSOR HEAD (Quick Release System)** has been designed from the ground up by EX Solutio Engineering to meet the challenges faced by technicians when a quick turn-around repair is require.

The head is designed to be compatible with the existing MEMS and DEMS Sensor range from EX Solutio Engineering and designed to meet the toughest conditions (certified **Ex ia I**) in the Mining and Commercial Industries.

The module (**QRS SENSOR HEAD**) can be removed and easily replaced by another, as the calibration and Sensor Cell information is all stored on the **QRS SENSOR HEAD**. This reduces costs in replacing Sensors as only the Head is replaced and not the entire Sensor Unit. The technician can simply pre-calibrate numerous **QRS SENSOR HEADS** on surface to replace older heads in the working areas. The **QRS SENSOR HEAD** also makes it easier to replace the internal detection Cell once its lifespan has elapsed. The head can then be recalibrated so as to be ready to be used for the next head replacement when needed.

The design only caters for a single gas detection cell so as to keep the unit as small as possible whilst providing the most features when coupled with the Ex Solutio MEMS and DEMS Sensor range. A list of gases shown below is some of the common gases available that can be selected, however the hardware is not limited to the table below as there are many other gases available that can be detected (information available on request).

Gas Type	Gas Range	Detection T90
CH4	0 - 4% LEL	< 20s
CO	0-250 / 500 / 1000 / 5000 / 20000ppm	< 25s
NH3	0 - 100ppm / 0 - 500ppm	< 40s / < 90s
O2	1-25%	< 15s
HCN	0 – 100ppm	< 120s
H2S	0 – 200ppm	< 55s
HCL	0 – 200ppm	< 200s
ETO	0 – 100ppm	< 200s
NO2	0 - 20ppm / 0 - 200ppm	< 40s / < 60s
COCL2	0 – 1ppm	< 120s
SO2	0-50ppm / 0-100ppm / 0-2000ppm	< 35s / < 40s / < 30s
CO2	0-5%	< 45s

QRS Sensor Head Features

- Quick turn-around time to replace older heads in working areas
- Low power consumption
- Easily change detection Cell
- Small and Light weight “Plug and Play” unit
- Calibration can be done off site as the QRS head stores all Calibration and detection Cell information
- Support for 3 different sizes of detection cells from various Cell OEMs.

I.S. Parameters

Ui = 16.1Vdc li = 3A
Ci = Neg. Li = Neg.

Operating Parameters

Propriety Operation to be used with MEMS or DEMS Sensor Range
Power Consumption = 300mW

(Power Consumption depends on Gas Sensor Head chosen).

Ordering Part Numbers

EXS.0021.02 – QRS Sensor Head Series

...Please Call for custom options...

Due to the numerous combinations available it would be too large to list all of them here