

Do you use a Gas Detector? If so you should read this:

Few people stop to consider not only does a sensor respond, but how fast does it respond?

The average walking speed for humans is 5km per hour or 83 metres per minute. Some gas detectors can take up to a minute or more to respond. That's 80 odd metres later if you are walking into a hazard at normal pace. If you're not walking it is up to a minute lost to take evasive action.

Recently Safety Alerts were issued to warn people to be aware of the potential to walk in to hazards whilst being distracted or awaiting for a sensor response particularly to rapidly depleting oxygen. On two reported occasions people entered areas of depleted oxygen and into a potentially dangerous and depleted environment. The instruments were functioning normally and met the requirements of the relevant standard. In one case the user was distracted by an already functioning alarm however in the other the operator was able to enter before the alarm initiated.

Critically everyone should be aware of sensor response times and should pay extra attention whether gas is expected or not. One of the critical outcomes of the report is efforts should be made to revise the design of gas detectors to minimise response times.

MSA Xcells are new proprietary designed sensors with a typical response time of less than 15 seconds for all sensors including oxygen, 4 times faster than the required response time and up to 8 times faster compared to some industrial detectors. Fast sensors do not alleviate the need for care and attention however they do add that extra confidence

The Altair 5X Multigas Detector contains the Xcell sensors which have a typical life of more than four years (including O₂). By miniaturizing the sensors' controlling electronics and placing them inside the sensor itself, MSA Xcell sensors offer superior stability, accuracy and repeatability. MSA Xcell Sensors are a breakthrough in chemical and mechanical sensor design, enabling faster response and span calibration times. With less time spent on calibration and bump tests, you save calibration gas, maintenance costs and, in turn, save money. But most importantly, in your industry, saving seconds on response time can also mean saving lives.

You can read more about these gas detectors at:

<http://us.msasafety.com/Portable-Gas-Detection/Multi-Gas/ALTAIR%26reg%3B-5X-Multigas-Detector/p/000080001600001023>

You can purchase one from **Fire & Safety Training.**

