



## **Case Study - ASTRIUM GMBH REVIEW OF 5SMKIII**

Analox's new 5SMKIII was tested by Europe's Centre of Competence for Environmental Control and Life Support (ECLS), part of Astrium GmbH. The team which tested the transducer are responsible for the design, development and realisation of ECLS systems. The 5SMKIII was tested by ECLS' system engineering group, working in the field of carbon dioxide (CO<sub>2</sub>) scrubbing, in particular for regenerative CO<sub>2</sub> scrubbers on submarines.

The Analox 5SMKIII is a carbon dioxide (CO<sub>2</sub>) transducer. It is an advanced, solid state infra red transducer utilising high quality optical components to ensure that measurements are specific to carbon dioxide with virtually no sensitivity to other gases. It also incorporates temperature, pressure and drift compensation.

ECLS propose using the 5SKMIII as part of a regenerative scrubber unit which is currently under development. They tested the transducer in their labs to assess its capability for this purpose.

Lutz Schauer, of ECLS, reported: "The tests have shown that the 5SKMIII is a capable and stable unit. In particular, the size of the unit makes it convenient for our purposes. We have previously used laboratory equipment for CO<sub>2</sub> measurements - however these instruments require frequent recalibration, are expensive, and much larger."