

MCERTS Approval - Latest Standard, Gas Analysis and Flow Measurement

When Gas Data achieved MCERTS, it didn't settle for gaining MCERTS for just one product - or for just one product in a range. The Coventry-based (UK) company gained MCERTS for its entire GFM400 series gas analyser range, from the entry-level GFM411 (single channel analyser), right through to the GFM435 (ultimate landfill portable analyser).

These MCERTS-approved instruments (also ATEX Certified) are simple and quick to use, light weight and have been designed to help engineers minimise downtime and maximise efficiency.

Gas Data's MCERTS achievement (Certified Products for Portable Emission Monitoring Systems) saw its complete

GFM400 series gas analyser range fully approved to the most up to date and demanding MCERTS Performance Standards for Portable Emission Monitoring Systems, Version 3.1 dated February 2010 in the certified ranges of:

Methane (CH ₄)	0 to 60% vol
Carbon Dioxide (CO ₂)	0 to 40% vol
Carbon Monoxide (CO)	0 to 2000 ppm
Flow	0 to 100 l/h
Hydrogen Sulphide (H ₂ S)	0 to 200 ppm
Hydrogen Sulphide (H ₂ S)	0 to 5000 ppm
Oxygen (O ₂)	0 to 20.9% vol

MCERTS-accreditation for Gas Data also included the highly beneficial features of Flow Rates and Hydrogen Sulphide (as above), giving its portable gas analysers the most comprehensive performance endorsement on the market.

Gas Data's Managing Director Chris Dakin, commented: "MCERTS has become a very important factor in purchasing decisions, by gaining certification across our entire GFM400 series range, we give our customers complete peace of mind that they are investing in instrumentation that matches even the toughest legislative demands – every time. This avoids time and money wasted on unsatisfactory solutions".

The GFM435 sets a high standard. Having a comprehensive MCERTS-certification it really is the ultimate landfill/remedial site meter. The analyser measures gas concentrations, but it also measures pressures, flows and temperatures and because of this it can be used to equally great effect at peripheral boreholes and gas extraction wells.

With further novel features such as a Hexane measurement channel and direct readout of photo-ionisation detector (PID) compensation factors, the GFM435 is optimised for site investigation and peripheral landfill monitoring.

The MCERTS scheme for portable emissions monitors was first released in March 2005, providing a framework within which measurements can be made in accordance with the Environment Agency's quality criteria. It promotes public confidence in monitoring data and provides industry with a proven framework for developing, and using, monitoring systems that meet the Agency's performance requirements.



In the UK, MCERTS is operated on behalf of the Environment Agency by Sira Environmental Ltd. The UK Accreditation Service (UKAS) certifies Sira to undertake the product and personnel certification activities which underpin the MCERTS scheme and is regularly reviewed. The latest standard is the MCERTS Performance Standards for Portable Emission Monitoring Systems, Version 3.1 dated February 2010.

As the chosen partner of the Environment Agency to run the MCERTS certification schemes, it is Sira who has provided all test, assessment and auditing services for Gas Data's range of instruments. Sira have been at the forefront of emission monitoring and calibration testing for over 20 years and was part of the Sira Group, which was established in 1918.

The product certification process is extensive and thorough. After first assessment of the instruments against the latest MCERTS standard, Sira's experts work with Gas Data's development engineers to derive a comprehensive set of tests to be carried out on a range of sample instruments. The tests check that not only the instruments respond in an accurate way to all inputs but they also subject the instruments to extremes of temperature over a period of time to demonstrate longer term stability and durability.

A key element to the successful outcome of these tests was Gas Data's quality control of its business to ISO9001 standards. Gas Data's development and production records already contained much of the evidence needed to prove the performance of the design and were backed up by the excellent results of the type testing carried out over a period of around 9 months.

It is not just the sample instruments and their components that must meet the standard – to be sure that all instruments manufactured from now on are up to standard, a specific MCERTS audit of Gas Data's production and calibration facilities is conducted by independent auditors from Sira on a regular basis and any changes in process, components or design must be approved. This audit checks that all instruments will be constructed and tested correctly and that finally the instruments are fit to be marked with the MCERTS logo.

The MCERTS-approval recently helped Gas Data secure an order for its analysers to be used at a former haulage yard in Bury that was being considered as a site for new detached residential properties having associated private gardens, parking and landscaped areas. Gas Data's MCERTS-approved GFM435 analysers were used to help identify potential geotechnical and geo-environmental constraints that may have restricted the proposed redevelopment of the site - and to provide geotechnical data to assist in development design parameters.

Monitoring methane, carbon dioxide, carbon monoxide, hydrogen sulphide, oxygen and atmospheric pressure, Gas Data's GFM435 is



designed with a built-in gas flow transducer that is capable of measuring the very low level but significant gas flows that can be found emanating from the ground. Results from the Gas Data analysers helped to determine whether construction commenced and whether certain building materials were required, such as, suspended floor slabs, gas membranes and ventilated sub-floors.

Chris Dakin added "MCERTS has become a key factor in the purchasing decision and the MCERTS certification has boosted our enquiry rate significantly. We can see first-hand how our investment in this comprehensive certification gives confidence to industry and how our GFM400 series range meets stringent performance criteria set out in current Environment Agency standards." He went on to conclude "Across the many market sectors we serve, including biogas, landfill, contaminated land and odour control, the mark of MCERTS is a significant asset".



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