Real-Time Multigas Analyser

SMS modular concept solutions are fully automated and built portable with ultra-compact features, making it easy to transport for multiple field usage.

System Overview

Our solutions offer a multi-component gas analysis at unparalleled speed that measures methane, ethane, propane, iso-butane, iso-pentane and a combined measurement for (n-butane, n-pentane and n-hexane), as well as percent level H_2S and CO_2 gas.

Constant, Accurate Data under Safer Environment

Under dangerous atmospheres, manual collection of gas or liquid samples can lead to complicated scenarios that will impact personnel health and safety. The process is time-consuming as the samples will need to be sent to the lab before obtaining the concentration analysis data. With our expertise, the operators and well test engineers can gain data accurately and remotely in a much safer environment.

Benefits

Improve safety

- Fully automated modular concept solutions
- Zero emission sampling reduced environmental risk and personnel exposure to potentially harmful samples

Reliable and Repeatable Data

- Provide immediate, real-time information
- No interference from other components of sample
- Higher resolutions ensure accurate measurement
- Seamlessly integrate with your current monitoring system
- Specific gravity for accuracy: ±0.5%

Remote Monitoring

- Save on manpower and offshore bedspace
- Increase efficiency

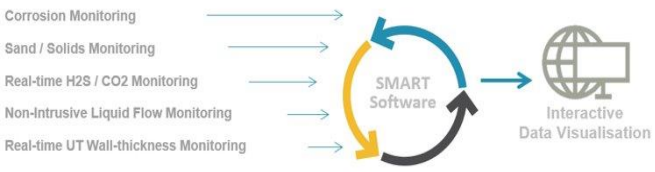
Intelligent Alarming

- Fully flexible alarm definition and transmit options

Portable, ultra-compact features

- Easy to transport for multiple field usage

Data Integration



SMS cloud-hosted visualisation suite built with unique, compelling and critical features for clients to access data from multiple sensors via an online interactive reporting system from anywhere in the world. Real-time data can now be analysed and interpreted quickly and easily, using 3D imagery of sensor locations and a graphical interface that you can control and direct with ease for maximum clarity.

Click to watch **SMS Smart Reporting Demo** or **SMS Zero Manpower Solutions Video.**

Installation and Maintenance

Our highly trained field technicians and engineers will ensure the system installed and operates successfully, meeting the regulatory standards.

Aside from supplying the products, we can support your needs in optimising the life and reliability of your analyser under tailored maintenance program and troubleshooting. SMS provides both on site and remote support for clients globally.

Training and Rental Package

All SMS products are available for training and rental package upon request.

Aberdeen / Abu Dhabi / Kuala Lumpur
www.smsintegrity.com
info@smsintegrity.com

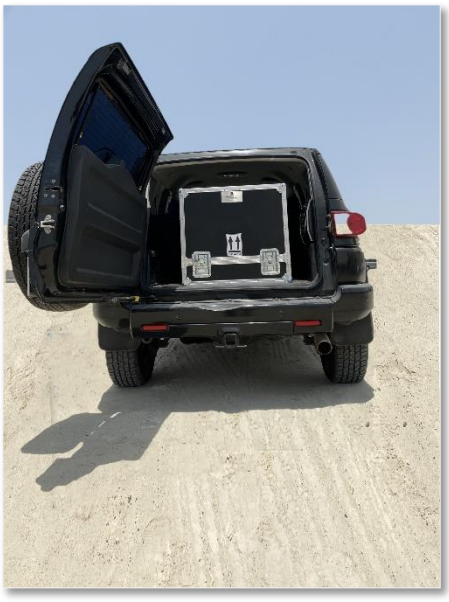
Real-Time Multigas Analyser

Features

- Data logging
- Stream Switching
- Fast response times from 1 to 10 seconds
- No carrier gas or instrument air required
- First principal measurement
- Physical properties such as Heating Value (BTU)
- Linear response throughout the measurement ranges
- Sample cell pressure and temperature compensated
- Remote & completely unattended operation
- Additional measurement recipes available
- Multi-component hydrocarbon gas analysis plus percent level H_2S and CO_2
- Wide range of additional components/recipes to choose from
- Limited maintenance required
- Low total cost of ownership
- Advanced software provides full configurability

Application

- Natural Gas measurements including processing, transmission, storage and distribution
- Power Generation (turbine, internal combustion engine, fuel cell)
- Truck / Ship / Railcar / Unloading Terminals
- Portable / Temporary analysis
- Flare Gas Monitoring
- Fuel Gas Monitoring
- LNG / LPG / BOG
- Process Industries
- Pipeline Blending
- Gas Plant Inlet
- Acid Gas



UK Head Office
Energy Development Centre
Aberdeen Science & Energy Park
Claymore Drive, Bridge of Don
Aberdeen, Scotland AB23 8GD

Tel: +44 (0) 1224 853 525
Fax: +44 (0) 1224 707 999
Email: info@smsintegrity.com

Malaysia Office
SMS Sand Management SDN BHD
26th Floor, Menara Maxis
Kuala Lumpur City Centre
50088 Kuala Lumpur, Malaysia

Tel: +60 (0) 3 2615 2606
Fax: +60 (0) 3 2615 2699
Email: info@smsintegrity.com

www.smsintegrity.com

Specifications

Hydrocarbon Analyzer shown with a Sample Conditioning System for Saturated & Dirty Gas

Ex Analyzer

Measurement Ranges	Methane (CH_4)	:2000ppm – 100%
	Ethane (C_2H_6)	:2000ppm – 25%
	Propane (C_3H_8)	:2000ppm – 25%
	i-Butane (C_4H_{10})	:1000ppm – 10%
	n-Butane (C_4H_{10}) + n-Pentane (C_5H_{12})	:1000ppm – 10%
	i-Pentane (C_5H_{12})	:1000ppm – 10%
	Carbon Dioxide (CO_2)	:0.02% – 50% 200ppm – 500,000ppm
	Hydrogen Sulfide (H_2S)	:0.02% – 50% 200ppm – 500,000ppm
Accuracy	Gas Channels	: ±0.3 mol% or ±1% of Full Scale or ±3% of Reading (greater of)
	HHV & WI	: ±0.7% of Reading or ±0.25 MJ/m3 (greater of)
	Specific Gravity	: ±0.5% of Reading
Repeatability	Less than 0.1%	
Calibration	Permanent Factory Span Calibration **(Note: User component correction factors can be written to system)** Zero gas recommended upon start-up and every 1-2 months	
Update Time	1 second – 10 seconds typical, software configurable **(Longer averaging time improves precision)**	
Sampling	Technique	Flow through cell (100ml internal volume)
	Flow Rate	0.1 – 2 LPM (typical)
	Pressure	0 – 2 psig (standard)
	Sample Temp	0 – 50°C note cell is maintained at 60°C
	Connections	¼” Swagelok
Power	24 VDC (Optional 120/240 VAC, 75 peak 35 watts nominal)	
Display	128 x 64 Graphic Display; Menu is scrolled by internal button or external magnet.	
Outputs	128 x 64 Back-lit graphical display with scrolling menu Dual isolated 4-20 ma loop powered analog outputs 4 additional 5 amp SPDT alarm relays 4 solid state solenoid drivers for stream switching 4 dry contact inputs Internal archive storage via HMI “I.C.E.” Platform Modbus serial RS-232 and RS-485 Modbus TCP/IP via ethernet	
Hazardous Area Certification	CSAus Certified for Class I Division 1 and 2, Groups B,C,D ATEX Ex nA nC nL IIC T4 Gc	
Dimensions	61.0 x 45.7 x 30.5 cm	65kg (approx)
	24” x 16” x 12”	135lbs (approx)

UK Head Office
Energy Development Centre
Aberdeen Science & Energy Park
Claymore Drive, Bridge of Don
Aberdeen, Scotland AB23 8GD

Tel: +44 (0) 1224 853 525
Fax: +44 (0) 1224 707 999
Email: info@smsintegrity.com

Malaysia Office
SMS Sand Management SDN BHD
26th Floor, Menara Maxis
Kuala Lumpur City Centre
50088 Kuala Lumpur, Malaysia

Tel: +60 (0) 3 2615 2606
Fax: +60 (0) 3 2615 2699
Email: info@smsintegrity.com

www.smsintegrity.com