

## 1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 23ATEX1653X Issue: 0

4 Equipment: 625 Series Gas Analyzer, Models OMD-625 and H2S-625

5 Manufacturer: Southland Sensing Ltd

6 Address: 4045 E Guasti Rd #203, Ontario, CA 91761, USA

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018

EN 60079-1:2014

EN 60079-11:2012

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

 II 2 G Ex db ib IIB+H2 T4 Gb T<sub>amb</sub> -20°C to +50°C



**Schedule**

13 Description of Equipment or Protective System

The Series 625 gas analyzers detect percentage of gases in a sample process stream. The H2S-625 detects and measures percentages of hydrogen sulfide. The OMD-625 detects and measures percentages of Oxygen. Construction is the same except for the sensing element itself and minor electrical component changes to accommodate the different sensing elements. Power enters an Ex d enclosure onto a power PCB and this has I.S. outputs to intrinsically safe circuits that exit through an Ex d bushing. The I.S. circuits are contained within a neighbouring sheet metal enclosure that provides IP20 protection and is fitted with the gas sensing element. Both enclosures are mounted upon a stainless steel backplate for wall mounting. As an option, mechanical components may also be mounted to the backplate such as simple valves and rotameter to facilitate the customer introducing sample streams into the sensing element. The sheet metal enclosure is also fitted with a simple LED screen HMI.

**Model Nomenclature:**

**Order Information:**  
Record Part Number with selected options in Blank Indicated Area of Form

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**Model Number:**  
H2S-625 H2S Analyzer

**Selected Range & Sensor:**  
 1 0 - 200 PPM; H2S-1x PPM H2S Sensor (Ranges: 0 - 10 ppm, 0 - 50 ppm, 0 - 100 ppm, 0 - 200 ppm)  
 2 0 - 2000 PPM; H2S-2x PPM H2S Sensor (Ranges: 0 - 100 ppm, 0 500 ppm, 0 - 1000 ppm, 0 - 2000 ppm)  
 3 0 - 10000 PPM; H2S-3x PPM H2S Sensor (Ranges: 0 - 1000 ppm, 0 - 2000 ppm, 0 - 5000 ppm, 0 - 10000 ppm)

**Electronics Package:**  
 4 12 - 24V DC Input Power  
 4M 12 - 24V DC Input Power + MODBUS RS485 RTU  
 7 100 - 240 VAC Input Power  
 7M 100 - 240 VAC Power + MODBUS RS485 RTU

**Gas Connections:**  
 4 1/4" Compression Tube Fittings with Sample / Span Valve & Flowmeter  
 6 6 mm Compression Tube Fittings with Sample / Span Valve & Flowmeter  
 D Delete Sample / Span Valve & Flow Meter, 1/8" Compression Tube Fittings

H2S-625 - \_\_\_\_\_ Use This Part Number When Ordering

**Order Information:**  
Record Part Number with selected options in Blank Indicated Area of Form

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**Model Number:**  
 OMD-625 Oxygen Analyzer  
 OMD-625D Oxygen Analyzer (Delete Sample System, 1/8" Compression Tube Gas Inlets)

**Selected Range & Sensor:**  
 3T Trace Analysis Standard (TO2-133): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%  
 4T Trace Analysis Standard (TO2-233): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%  
 5T Trace Analysis < 500 PPM H2S (TO2-238): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%  
 5P Percent Analysis Standard (PO2-160): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%  
 6P Percent Analysis Standard (PO2-24): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%

**Electronics Package:**  
 4 12 - 24V DC 4-wire Power  
 4M 12 - 24V DC Power w/ Bi-Directional MODBUS RS485 RTU  
 7 100 - 240V AC Power  
 7M 100 - 240V AC Power w/ Bi-Directional MODBUS RS485 RTU

**Gas Connections:**  
 4 1/4" Compression Tube Fittings  
 6 6mm Compression Tube Fittings  
 8 1/8" Compression Tube Fittings

OMD-625 - \_\_\_\_\_ Use This Part Number When Ordering

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Certificate: ExVeritas 23ATEX1653X

Issue 0

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For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

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## Schedule

Report Number	Cert Issue Date	Issue	Comment
4167/A/1	06-09-2023	0	Initial issue of the Prime Certificate

### 14.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
625 Series Bill of Materials	625-0001	1.03	07/01/2023
625 Series Mechanical Assembly (sheet 7)	625-0002	1.02	07/01/2023
XJDH N4 Approval For Southland ATEX / IECEX	SB4649	A	11/08/2022
625 Series Power Supply Schematic	EX-PCB-10041-SCH	B5	08/09/2023
625 Series Power Supply Bill of Materials	EX-PCB-10041-BOM	1.00	08/09/2023
625 Series Power Supply Layout	EX-PCB-10041-BRD	A	08/16/2023
625 Series Power Supply Gerber Files (ZIP)	EX-PCB-10041-GBR	B5	08/16/2023
625 Series Main Board Schematic	EX-PCB-10047-SCH	B3	08/11/2023
625 Series Main Board Bill of Materials	EX-PCB-10047-BOM	1.00	08/09/2023
625 Series Main Board Layout	EX-PCB-10047-BRD	B3	08/11/2023
625 Series Main Board Gerber Files (ZIP)	EX-PCB-10047-GBR	B3	08/11/2023
625 Series Modbus / PicoPort Schematic	EX-PCB-10049-SCH	A	04/21/2023
625 Series Modbus / PicoPort Bill of Materials	EX-PCB-10049-BOM	1.00	07/10/2023
625 Series Modbus / PicoPort Layout	EX-PCB-10049-BRD	A	04/21/2023
625 Series Nameplate Drawing	625_Series_Nameplate_2 023	1.00	07/06/2023

### 15 Conditions of Certification

#### 15.1 Special Conditions for Safe Use

- Only cable glands and conduit sealing fittings certified for protection types 'd' and have an IP66 rating may be used.
- All unused device openings must be fitted with a certified close-up plug with protection types 'd' and have an IP66 rating.
- Only one Hazardous Location Solutions reducer shall be used with any single cable entry on the associated equipment.
- The cable specific minimum ambient temperature is marked on the line bushing and it is detailed in the shipping documents.
- Stopping plugs are not used in conjunction with any other cable entry device.
- Potential Electrostatic Charging Hazard – See Instructions

#### 15.2 Conditions for Use (Routine tests)

- None

### 16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

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