E2639 Ammonia Detector







Standalone and multifunctional

E2639 is a next-generation product developed to deliver reliable detection of toxic and combustible gases in a wide range of market sectors such as:

- HVAC/R
- Agriculture
- Food and beverage
- Healthcare and laboratories
- Process industries

The detector is based on the unified PluraSens® Platform having RS485 Modbus RTU and 2 × 4-20 mA outputs offering customers different possibilities for communication with controllers and SCADA systems.

E2639 is also equipped with 3 x SPDT relays (2 for alarms, 1 for fault) accompanied with 4 x LEDs and a buzzer for better safety and visual, audible indication.

Most of known sensing technologies are implemented providing a possibility to detect more than 20 different gases and gas groups.



Convenience of use

User-oriented installation

E2639 is equipped with 3 x M20 cable glands and duplicated terminals for time saving during installations.

Enclosure design includes "ears" on sides making mounting of the detector easier.

Multiple calibration possibilities

Optional **WiFi module** gives a possibility of connection to a smartphone or tablet PC for convenient calibration and configuration.

No additional apps are required, only URL and password protection with different levels of access.

GSH Smart Sensors calibration can be done through E2639 or by connecting GSH module directly to PC using special configurator (SSC).

Pre-calibrated Smart Sensors

GSH Smart Sensors come already pre-calibrated.

Replacement is as fast as possible through M12 connector without even opening a lid.

Being fully **interchangeable**, any GSH Smart Sensor can be attached to the same E2639 main unit (replace HFC with CO2 or with NH3 and so on) and purchased separately.

Built-in calendar may notify end customers when calibration is due.















Ammonia Detector E2639-NH3



Features

- Two 4-20 mA user configurable analog outputs
- RS485 Modbus RTU digital interface
- 3 x SPDT Relays, 2 for alarms, 1 for fault
- 2 x 24 V Output for controlling alarm signals*
- Magnetic button for alarm reset & WiFi enable
- WiFi interface for configuration and calibration option

Specifications

Calibration Ammonia NH₃ Sensor type Electrochemical (EC) Sampling method Diffusion

Typical detection ranges, ppm 0...100 0...300 0...1000 0...5000 Maximum overload, ppm 200 500 1500 10 000 Response time T90, s < 75 <75 <75 <120

Resolution / digital unit 1 ppm Signal update Every 1 second Sensor lifetime > 2 years Maintenance interval 6 months

Self-diagnostics Full functionality check at start-up

Warm-up time ≤ 1 min

Power supply 14...36 VDC (default)

24 VAC or 230 VAC as options

< 6 VA** Power consumption

Digital interfaces RS485, Modbus RTU protocol

(Optional) 2.4 Ghz WiFi (802.11 b/g/n)

Analog outputs 2 × 4-20 mA user configurable

Output scale width Recommended: 5-100% of the range;

> 10 × resolution in any case

Enclosure Grey ABS plastic, wall mount,

protection class IP65

Dimensions H80 × W190 × D40 mm (housing only)

H150 with cable glands

Operating conditions -40...+50 °C, -30...+50°C (for 0...5 000

ppm), 15...90 %RH

Alarm signalling

Acoustic

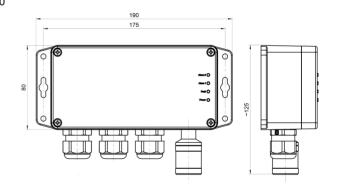
Visual 4 x LEDs (red, green and yellow)

Buzzer 85 dB

Applicable standards EN378-3; EN62990-1; EN61010-1;

EN50270; EN50271; ASHRAE 15

Dimensions



^{* 24}V outputs are relative to power supply e.g. supplied voltage of device is transferred to output voltage ** Does not consider 24V output connected device consumption

GSH Smart Sensors Specification

Connector M12 industrial circular

Service counter Built-in calendar indicates when calibration

is due

Calibration Through E2639 or by connecting

to SSC configurator

Remote sensor probe

(option)

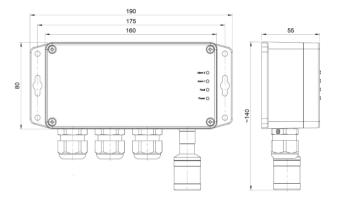
Shielded cable up to 5m length

Sensor head dimensions ø 25 mm, height 54 mm



E2639-GSH Dimensions





Ordering code for E2639-NH3 standard version

Target gas	NH3				
Sensor type	-EC (for electrochemical sensor)	Other technologies available on request			
Detection range	-100 (for 0100 ppm)	-300 (for 0300 ppm)	-1000 (for 01000 ppm)	-5000 (for 05000 ppm)	Other ranges available on request
Wifi	-WF (yes)	Leave the field empty (no)			
Power supply	-24VDC	-24VAC	-230VAC		

Code examples: E2639-NH3-EC-100-WF-230VAC

Ordering code for version with Smart Sensor

E2639-GSH main unit *							
Wifi	-WF (yes)	Leave the field empty (no)					
Power supply	-24VDC	-24VAC	-230VAC				

^{*} Can be supplied separately

Code example: E2639-GSH-WF-24VDC

GSH-NH3 Smart Sensor *						
Target gas	NH3					
Sensor type	-EC (for electrochemical sensor)	Other technologies available on request				
Detection range	-100 (for 0100 ppm)	-300 (for 0300 ppm)	-1000 (for 01000 ppm)	-5000 (for 05000 ppm)	Other ranges available on request	
Remote probe (option)	-RP	Leave the field empty (if no remote probe)				
Length of remote probe (m)	-3	-5	Other length on request			

^{*} Can be supplied separately

Code examples: GSH-NH3-EC-100-RP-3

Disclaimer

This document is subject to change.

Latest and actual version is located on the Manufacturer's web page.

