

**Description & Features:**

- The WNO2 Series is specifically designed for continuous monitoring of NO₂ gas concentration in any environment
- Heavy-duty die-cast aluminum housing for installation in a wide range of environmental areas
- Designed for wall-mounting for convenient installation
- Available with built-in display (LED or LCD) screen and audible/visual alarm for on-site monitoring and immediate signalling (audible alert)
- May be integrated into various gas alarm systems or PLC/DCS control systems with standard analogue or RS485 (Modbus RTU) output
- Customization available for dedicated installations and private labelling
- 1 year warranty

Applications:

- The WNO2 is a product which is suitable for all environments where nitrogen dioxide gas is present or may be present
- Appropriate for installation in occupied (meeting & board rooms etc) and unoccupied areas (duct and ventilation chambers, hazardous equipment)
- Widely used for industrial safety and environmental quality monitoring, combustion process control, laboratory safety and as a method for early fire safety warning

Technical Parameters

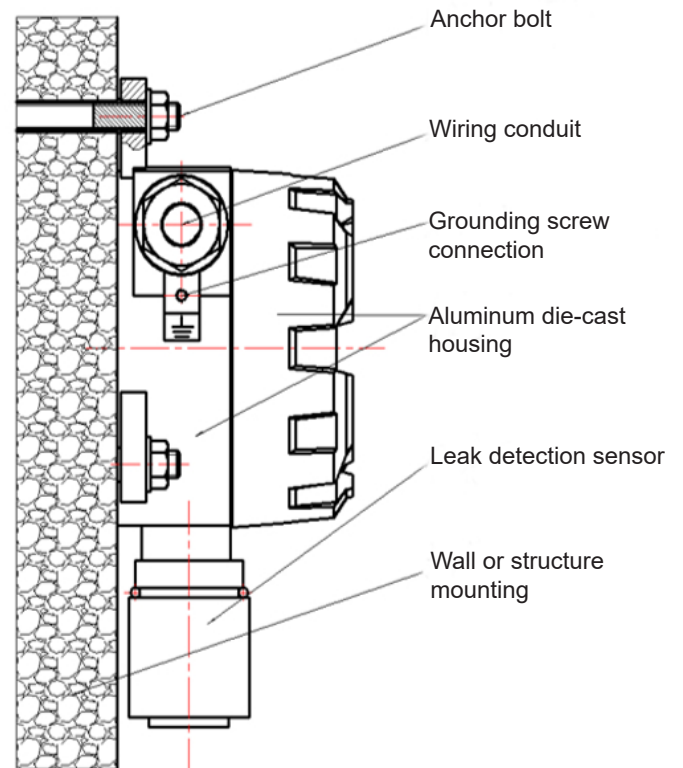
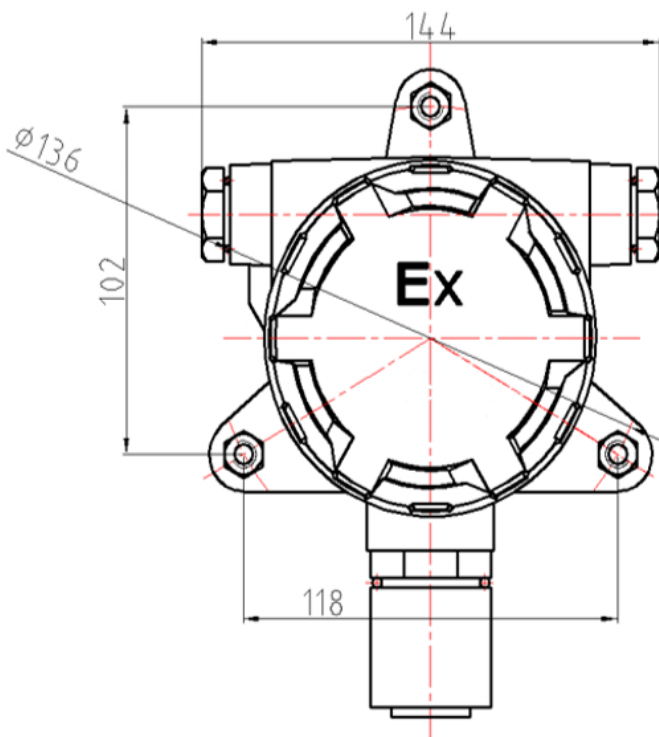
Detected Gas	Nitrogen Dioxide (NO ₂)
Detection Principle	Electrochemical
Measurement Range	0-20 PPM
Output Signal	4-20mA (3-wire), RS485 (Modbus-RTU)
Power Supply	24VDC
Display	No Display, LED or LCD; Resolution 0.1 PPM
Alarm Mode	Audible & visual (≥85dB buzzer)
Alarm Point	5 PPM
Response Time	T ₉₀ ≤ 60 s; Warm-up <30 s
Accuracy	≤ ±3% FS; Repeatability ≤ ±2%
Working Environment	-10° to 50°C (14° to 122°F) & 15–90%RH, non-condensing
Sensor Lifespan	Typical 2–3 years (depending on ambient conditions)
Installation	Wall-mounted
Housing Material	Die-Cast aluminum
Enclosure Rating	IP65
Certification	CE

Dimensions (mm) Wall Mounted

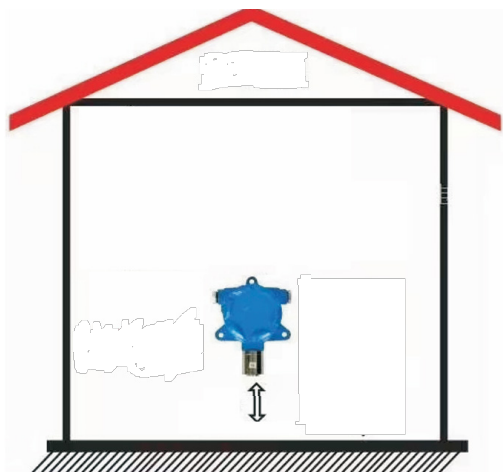


102 mm =	4.0"
118 mm =	4.6"
136 mm =	5.4"
144 mm =	5.7"

Cross Section



Installation Information



Note 1: The WNO2 sensor must be installed in a vertical position (with the sensor facing downwards)

Note 2: For gases heavier than air, install the WNO2 detector 30 cm / 12" above floor level (on either side of the source to be monitored).

1.) Installation Location

- Install within 1–3 metres (3.3') of possible leak source(s), that is, in areas where gas is most likely to leak or accumulate
- Based on the characteristic that NO₂ is denser than air, it is recommended to install at a height of 0.3–1 metre (0.98' to 3.28') above the floor
- Ensure the installation location has good airflow, avoid equipment with strong electromagnetic interference e.g. motors and capacitors, avoid dust accumulation and select a convenient location for convenient and daily inspection and maintenance

2.) Installation and Mounting

- The WNO2 Series can be installed on a wall or pipe using the mounting bracket, ensure the device is securely fastened before operation

3.) Installation and Mounting

- Power source: Connect to 24VDC power supply and observe the correct polarity (positive+/-negative-)
- 4-20mA output cable: 3-wire configuration — power positive, signal positive, common ground
- RS485 communication cable: Observe bus polarity. Use shielded twisted-pair cable and connect a 120Ω termination resistor at the furthest device on the bus

Selection Table

WN02 Series - Wall Mountable - Nitrogen Dioxide (NO2) Gas Detector All In One Air Quality Environmental Sensor

Description	Technical parameters			
Power supply	24 Vdc	1		
Output signal/type & Disolay	4-20mA output (no display)		1	
	RS485 output (no display)		R	
	4-20mA output, LED display + alarm light		AED	
	4-20mA output, LCD display + alarm light		ACD	
	RS485 output, LED display + alarm light		DED	
	RS485 output, LCD display + alarm light		DCD	
	Other type		D	
Customization	Special types, labelling etc			Z###

Additional Notes and Warnings

Safety Warning: The WN02 Series is a safety device and should not replace strict safety operating procedures. Before working in a hazardous area, always use a portable detector for final validation

Regular Calibration: To ensure measurement accuracy, it is recommended to perform zero-point and span calibration every 3–6 months. Shorten the calibration interval when used in harsh environments

Avoid Over-exposure: Do not expose the sensor to high concentrations of gas or chemicals that may damage the sensor (such as silicates, sulfides, etc.) for extended periods, as this will permanently damage the sensor

Prevent Blockage: Do not touch the sensor membrane with sharp or hard objects. Prevent dust and oil from blocking the sensor's air passages

Power Matching: Strictly use a 24VDC rated power supply. Overvoltage or reverse connection may cause permanent damage to this device

Maintenance: Regularly clean the WN02 housing and check that the air inlet passages are clean and unobstructed. Do not disassemble the instrument as this will void warranty

Installation Qualification: System installation and wiring must be carried out by qualified technical professionals, complying with all local and national electrical safety standards