

Honeywell OmniPoint™

Multigas Fixed Gas Transmitter – up to 3 sensors ATEX, IECEx, UL, CSA certified

Multigas transmitter supporting up to 3

ATEX, IECEx, UL, CSA certifications

IP66 / IP67 robustness – NEMA 4X



Technical specifications

- Type: Fixed multigas gas transmitter
 - Number of sensors: Up to 3 sensors simultaneously
 - Compatible sensor types: XP (catalytic, infrared), XPIS (electrochemical)
 - Enclosure material: Aluminum alloy with 5-layer marine coating or 316 stainless steel
 - Enclosure weight (without display): Aluminum: 2.45 kg
Stainless steel: 5.37 kg
 - Weight with display module: Aluminum: 2.92 kg
Stainless steel: 5.84 kg
 - XPIS sensor module weight: 0.80 kg
 - XP sensor module weight: 0.69 kg
 - Mounting: Wall-mounted or pipe-mounted, Ø 50 to 140 mm (optional kit)
 - Cable entries: 4 × M25 or 3/4" NPT
 - BLE antenna entry: 1 × M22 (optional)
- ### Power Supply & Electrical Consumption
- Input voltage range: 12–32 VDC (XP, XPIS), 18–32 VDC
 - Transmitter power consumption: 4.5 W nominal, 8.5 W max
 - Sensor power consumption: 1.7 W max
 - Maximum system power consumption: 17 W

Environmental Conditions

- Ingress protection: IP66 / IP67 (IEC/EN 60529)
- Classification: NEMA 4X
- Operating temperature: –55 °C to +75 °C
- Relative humidity: 0 to 99% RH (non-condensing)
- Operating pressure: 90 to 110 kPa
- Storage conditions: –55 °C to +75 °C, 0 to 99% RH

Display & User Interface

- Display type: Circular color TFT display
- Display size: 3 inches (76 mm)
- Controls: 4 capacitive touch buttons
- Visual indication: Multicolor LED ring (green, red, yellow, blue)
- Navigation: Intuitive touchscreen interface

Outputs & Signals

- Analog outputs: 3 configurable 4–20 mA outputs
- Output modes: Sink, Source, or Isolated
- Signal accuracy: ±1% full scale
- Current states: 1 mA: Fault, 2 mA: Warm-up
3 mA: Warning

Product description

The **Honeywell OmniPoint™** is a next-generation fixed gas detection transmitter designed for continuous monitoring of toxic gases, flammable gases, and oxygen in high-risk industrial environments. Intended for use in hazardous areas (ATEX, UL, CSA), it provides a flexible, scalable, and highly reliable solution capable of managing up to three sensors simultaneously. Designed to optimize operator safety and operational continuity, **OmniPoint™** features an intuitive color touchscreen interface, eliminating the need for magnets and significantly reducing installation, configuration, and maintenance time. Its multicolor LED ring provides immediate visual indication of system status (normal operation, alarm, fault, communication).

Thanks to its multi-sensor compatibility (XP and XPIS) and optional communication modules (Bluetooth® BLE, HART®, Modbus RTU), **OmniPoint™** integrates easily into existing safety architectures and industrial monitoring systems.

► Main applications

The **Honeywell OmniPoint™** transmitter is particularly suited for high-risk industrial environments such as oil and gas refineries, chemical and petrochemical plants, hydrogen storage and production facilities, as well as infrastructures dedicated to the transportation of liquefied natural gas (LNG). It is also used in power generation plants, wastewater treatment facilities, public utilities, and onshore oil and gas terminals, where continuous and reliable monitoring of hazardous atmospheres is essential to ensure the safety of personnel and assets.

► Maintenance & sensor replacement

Honeywell OmniPoint™ sensor cartridges are interchangeable and can be replaced directly on site, in hazardous areas and while powered on, without shutting down the transmitter. This design minimizes operational downtime, reduces maintenance time, and optimizes system availability.

► Relays

The transmitter features three configurable SPDT alarm relays and one SPDT fault relay, with a switching capacity of 50 VAC or 24 VDC at 5 A.

► Wiring

Two-wire wiring for XP and XPIS sensors up to 300 m, 4–20 mA analog outputs, and dedicated RS485 Modbus terminals.

► Certifications & Compliance

Certified for ATEX Zone 1, IECEx, UL/cUL, with NEMA 4X protection, IP66/IP67 ingress protection, and a 5-year manufacturer warranty.

► Communications

The transmitter supports the HART® protocol version 7 in point-to-point or multipoint mode, allowing connection of up to eight devices on the same loop. It can be equipped with an optional Bluetooth® BLE 5.0 module, providing a communication range of up to 20 m for configuration, maintenance, and local diagnostics. Modbus communication is handled via Modbus RTU over an isolated RS485 interface, with a configurable baud rate from 2,400 to 57,600 baud (9,600 baud by default). The Modbus address range is adjustable from 1 to 247, and the system can manage up to 247 nodes, including a maximum of 32 RTU per loop.

Sensor type	Gas	Cartridge reference	Selectable Full Scale Range	Default range	Steps	Resolution	Lowest detectable limit	Lowest Alarm Level	Default Alarm1 Level	Alarm 1 type	Default Alarm 2 Level	Alarm 2 type	Operating temperature
CAPTEUR XPIS													
NH ₃ (Low)	Ammonia	OPT-R1S-AM1	50 to 200 ppm	200 ppm	50 ppm	1 ppm	6 ppm	20 ppm	50 ppm	Rising	100 ppm	Rising	-20°C to 40°C -4°F to 104°F
NH ₃ (High)	Ammonia	OPT-R1S-AM2	200 to 1000 ppm	1000 ppm	50 ppm	1 ppm	30 ppm	100 ppm	200 ppm	Rising	500 ppm	Rising	-20°C to 40°C -4°F to 104°F
CO	Carbon Monoxide	OPT-R1S-CO1	100 to 500 ppm	300 ppm	100 ppm	1 ppm	5 ppm	15 ppm	100 ppm	Rising	200 ppm	Rising	-40°C to 55°C -40°F to 131°F
Cl ₂	Chlorine	OPT-R1S-CL1	5.00 ppm (Fixed)	5.00 ppm	N/A	0.01 ppm	0.15 ppm	0.50 ppm	1.00 ppm	Rising	2.00 ppm	Rising	-20°C to 55°C -4°F to 131°F
H ₂ S	Hydrogen Sulphide	OPT-R1S-HS1	10 to 50 ppm	15.0 ppm	0.1 ppm	0.1 ppm	1.0 ppm	3.0 ppm	5.0 ppm	Rising	10.0 ppm	Rising	-40°C to 65°C -40°F to 149°F
H ₂ S (High)	Hydrogen Sulphide	OPT-R1S-HS2	50 to 500 ppm	100 ppm	10 ppm	1 ppm	1 ppm	5 ppm	20 ppm	Rising	50 ppm	Rising	-40°C to 65°C -40°F to 149°F
O ₂	Oxygen	OPT-R1S-OX1	25 %vol (Fixed)	25.0 %vol	N/A	0.1 %vol	0.2 %vol	5.0 %vol	23.5 %vol	Rising	19.5 %vol	Falling	-40°C to 60°C -40°F to 140°F
SO ₂	Sulphur Dioxide	OPT-R1S-SO1	5 to 20 ppm	15.0 ppm	5.0 ppm	0.1 ppm	0.6 ppm	2.0 ppm	5.0 ppm	Rising	10.0 ppm	Rising	-40°C to 65°C -40°F to 149°F
CAPTEUR XP													
FL CAT	Flammables	OPT-R1X-FL1 (UL) OPT-R1X-FL2 (ATEX)	20 %LEL to 100 %LEL	100% LEL	10% LEL	1% LEL	3% LEL	5% LEL	20% LEL	Rising	50% LEL	Rising	-40°C to 75°C -40°F to 167°F
CH ₄ IR - LEL	Methane	OPT-R1X-ME1 (UL) OPT-R1X-ME2 (ATEX)	20 %LEL to 100 %LEL	100% LEL	10% LEL	1% LEL	3% LEL	5% LEL	20% LEL	Rising	50% LEL	Rising	-40°C to 75°C -40°F to 167°F
C ₃ H ₈ IR - LEL	Propane	OPT-R1X-PR1 (UL) OPT-R1X-PR2 (ATEX)	20 %LEL to 100 %LEL	100% LEL	10% LEL	1% LEL	3% LEL	5% LEL	20% LEL	Rising	50% LEL	Rising	-40°C to 75°C -40°F to 167°F