



Wireless protection from CO and NO₂ hazards without battery replacement, calibration or maintenance for two years

301W wireless gas detection network



User Friendly

- Self-contained, wall mounted enclosure
- Simple push button operation

Easy and Inexpensive to Install

- Simply wall mount (no hardwiring required)
- Turn it on and the 301W auto configures to the controller and is fully operational

Few Requirements - Simple Operation

- No calibration required for two years
- No monitor hardwiring required
- No battery replacement required for two years
- After two years, simply replace the easily removed sensor/battery pack

Input/Output Adaptability

- Allows for up to 25 remote transmitters in the system

Safety Measures

- Virtually no false alarms—accurate and reliable
- Mesh Network design creates route redundancy, so if one link fails, communication is automatically re-established through another monitor
- Avoids interference with Bluetooth, WIFI and other wireless systems
- Secure 128 bit encrypted wireless mesh network
- Periodic 'heartbeat' signal ensures all transmitters are continuously active

Beneficial Controller Options (301CW)

- Datalogging option available
- Optional BACnet/IP Output

By removing the necessity for expensive wiring and by greatly reducing installation costs, the 301W can cut the bottom line for a parking garage's CO/NO₂ gas monitoring system.

The 301W wireless gas transmitter is designed to detect carbon monoxide (CO) and nitrogen dioxide (NO₂) in parking structures or oxygen (O₂) in other applications. It operates for 2 years without calibration, maintenance or battery replacement. The 301W gas transmitter exchanges data with the 301C controller over a wireless mesh network via a secured 128 bit encrypted communication protocol. In contrast to traditional networks, this system offers greater flexibility and operational reliability together with significant installation and operational savings. Without the need of monitor hardwiring, installation costs are drastically reduced—simply wall mount the 301W transmitter, turn it on and it is ready for operation.

Unlike point-to-point or point-to-multipoint communication, if the communication path fails, the system automatically finds an alternative route. This enables continuous contact, even in harsh environments. The inherent network integrity combined with zoning capabilities and electrochemical sensor accuracy minimizes false alarms and ultimately trims operational costs.

Zoning / Averaging Features

The 301CW controller offers unique zoning capabilities which permit the averaging and comparison of multiple sensor readings. Zoning can reduce operational costs by ensuring that localized brief fluctuations registered at a single transmitter do not activate relays. For example, a car idling in a parking structure may locally increase a reading at a nearby transmitter. Rather than activating a fan as a result of the temporary localized fluctuation, zoning can be used to limit relay activation until the average reading for a zone exceeds a set-point. This can reduce run time of fans, yielding savings in both energy usage and wear and tear. The 301C has the capacity to manage input from three Modbus channels for up to 96 transmitters and up to 25 wireless transmitters which can be associated with up to 126 zones. Transmitters can belong to an unlimited number of zones, providing maximum operational and control flexibility.



Technical summary



301W General Specification

Uses	Wall mounted, wireless gas detector for carbon monoxide (CO) and nitrogen dioxide (NO ₂) hazards, and oxygen (O ₂) levels, to be used in conjunction with the 301CW controller.
Power Requirement	Battery designed to operate for 2 years
Size	22.5 x 10 x 5.7 cm (8.85 x 4 x 2.25 in.)
Weight	0.4 kg (0.88 lb.)
Sensing Technology	Electrochemical
Network Capacity	25 wireless transmitters to the 301C
Visual Indicators	Two LEDs
Radius of Detection	15.24 m (50 ft.)
Calibration	Not required for 2 years
Communication Protocol	2.4 Ghz - IEEE 802.15.4 - Secured 128-bit encryption
Alarms	Centralized alarm management via 301C wireless controller


Ratings and Certifications:

Certified to	FCC Part 15C IC RSS-210, Annex 8
Enclosure	CO, O ₂ : NEMA 4X Polycarbonate – ABS; NO ₂ : NEMA 1 Polycarbonate – ABS

301C General Specification

Uses	Wall mounted gas detection control panel for the annunciation of gas hazards detected by the complete range of Honeywell Analytics sensors (up to 25 301W transmitters) with relays for effective response to hazard(s) present (activation of ventilation fans, audible and/or visual alarms, etc).
Power Requirement	17-27 Vac, 18-36 Vdc, 350 mA @24 Vdc
Size	28 x 20.3 x 7 cm (11.02 x 7.99 x 2.76 in.)
Weight	1.1 kg (2.4 lb.)
Network Capacity	Three Modbus channels for up to 96 wired transmitters and up to 25 wireless transmitters Optional BACnet capacity
Communication Line Lengths (RS-485)	Up to 609 m (2000 ft.) per channel T-Tap: 20 m (65 ft.), maximum per T-Tap 40 m (130 ft.) maximum for all T-Tap combined
Relay Output Rating	5 A, 30 Vdc or 250 Vac (resistive load)
Alarm Levels	3 fully programmable alarm levels
Time Delays	0, 30 sec., 45 sec., 1-99 minutes before and after alarm; latchable
Outputs	4 DPDT relays (alarms and/or fault); 65dBA buzzer
Display	Large 122 x 32 dot matrix display
Operating Humidity	0-95% RH, non-condensing
Operating Temperature	-20 to 50°C (-4 to 122°F)

Ratings and Certifications:

Canada	CAN/CSA C22.2 No 61010-1  116662
USA	ANSI/UL 61010-1

Honeywell Analytics Lines of Business



Commercial

Gas detection from standalone units to fully engineered, multi-point systems, all offering cost-effective regulatory compliance

- » Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

- » Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial

Portables

Single or multi-gas Lumidor and other premium detectors with compact, lightweight designs ranging from simple alarm only units to advanced, fully configurable and serviceable instruments

- » Applications: underground utility and electricity ducts, boiler rooms, post-fire sites, sewers, industrial plants, industrial hygiene, first responder teams, remote fleets



Find out more

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