Gas Detection for the Water Treatment Industry

Honeywell



Fixed and Portable Gas Detection Systems and Controllers for Water and Wastewater Plants

A Complete Range of Gas Detection Systems for the Water and Wastewater Industry







Water purification and sewage treatment plants produce a variety of toxic and combustible gas hazards. In process areas, these include ammonia, carbon monoxide, chlorine, hydrogen sulfide, nitric oxide, nitrogen dioxide, ozone, sulfur dioxide and others. In confined spaces, there is a danger of oxygen deficiency. To protect employees and community, choose Honeywell Analytics gas detection.

Honeywell Analytics brings decades of experience and the industry's most advanced gas monitoring instrumentation to serve the water and wastewater industry. We offer a complete line of fixed and portable gas detectors for use in and around your facility. Our solutions exceed

all federal, state and local occupational safety and health regulations. From standalone detectors to larger controller-based systems, Honeywell Analytics is dedicated to protecting people, equipment and environment through cost-effective gas detection.

Fixed Gas Detection



Sensepoint XCD

- Flammable (catalytic or infrared), toxic and oxygen versions available
- New and retrofit applications
- Suitable for indoor or outdoor use
- Stainless steel or aluminium explosion-proof housing options
- IP66 as standard
- User friendly and intuitive tri-colour backlit display with digits, bar graph and icons
- Fully configurable via magnetic switches
- Optional remote sensor mounting*
- Selectable sink or source 4-20mA output
- Auto-inhibit during maintenance
- MODBUS communications for remote diagnostics/configuration*



Series 3000 MkII

- Gas detector 2 wire 4-20mA output
- Surecell[™] electrochemical sensors for hot & humid environments
- ATEX, UL, CSA (cUL) certifications
- Explosion proof transmitter
- Reduced routine maintenance costs
- Long life sensing elements
- Permits 'hot swap' of replacement sensors reducing down time
- Onboard fault diagnostic software & display
- Patented 'Reflex' sensing element verification diagnostics
- Easy menu / icon driven calibration



Optima Plus

- Fast speed of response to 100% LEL Methane, Ethane, Propane, Butane, Ethylene/Ethene
- Dual channel, fully compensated infrared optical configuration
- Heated stand offs and optics
- Failsafe operation
- Immune to catalytic poisons
- False alarm rejection with
 √2 Software™
- Works in inert atmospheres
- Advanced integral fault diagnostics
- Optional Modbus RS485 multidrop output
- Calibrates for over 100+ gases & vapors



Satellite XT

- Detects a wide range of gasses in safe area applications
- · Fast, reliable, specific gas detection
- Continuous real-time monitoring
- Interchangeable intelligent sensor
- No dynamic gas calibration required
- Generic sensor head electronics
- · Low cost of ownership
- · No moving parts





Gas Matrix Chart

Typical Applications	Honeywell Solution	Gases Detected
Bar Screen Room	XNX Universal Transmitter Sensepoint XCD	(CH ₄ , H ₂ S, O ₂ , CO) (CH ₄ , H ₂ S, O ₂ , CO)
Wet/Dry Well (Lift Stations)	XNX Universal Transmitter Sensepoint XCD Optima Plus IR Impact Pro	(CH ₄ , H ₂ S, O ₂ , CO) (CH ₄ , H ₂ S, O ₂ , CO) (CH ₄) (H ₂ S, CO, CH ₄ , O ₂)
Chlorine Storage Room	XNX Universal Transmitter Series 3000 XPIS Satellite XT	(Cl ₂ , NH ₃ , CLO ₂) (Cl ₂ , NH ₃ , CLO ₂) (Cl ₂ , NH ₃ , CLO ₂)
Sludge De-Watering	XNX Universal Transmitter Sensepoint XCD Satellite XT	(CH ₄ , H ₂ S, O ₂ , CO) (CH ₄ , H ₂ S, O ₂ , CO) (CH ₄ , H ₂ S, O ₂ , CO)
Wastewater Digester Tank	XNX Universal Transmitter Sensepoint XCD Optima Plus IR Impact Pro	(CH ₄ , H ₂ S, O ₂ , CO) (CH ₄ , H ₂ S, O ₂ , CO) (CH ₄) (H ₂ S, CO, CH ₄ , O ₂)
Aeration Tanks/Digesters	XNX Universal Transmitter Series 3000 XPIS Satellite XT (IS)	(NO) (NO) (NO)
Pumps and Incinerators	XNX Universal Transmitter Sensepoint XCD	(CO, CO ₂) (CO, CO ₂)
Water Disinfection	XNX Universal Transmitter Series 3000 XPIS Satellite XT	(NH ₃ , Cl ₂) (Cl ₂ , NH ₃) (Cl ₂ , NH ₃)
Confined Spaces	XNX Universal Transmitter Sensepoint XCD Impact Pro	(CH ₄ , O ₂ , CO, H ₂ S) (CH ₄ , O ₂ , CO, H ₂ S) (CH ₄ , O ₂ , CO, H ₂ S)

Portable Gas Detection



GasAlertQuattro

- Reliably monitors for H₂S, CO, O₂ and combustibles
- IntelliFlash verifies operation and compliance to both the user and supervisors from up to 20 ft. / 6.1 m
- Field-proven Surecell sensors offer an unprecedented performance, even in the harshest environments
- Graphic LCD displays easy to identify icons that indicate operational information
- Full function self-test is initiated upon activation and runs continuously during operation
- Suited to a wide range of industrial applications including confined space entry
- Compatible with MicroDock II automated test and calibration system

Impact Pro

- Portable 4 gas (simultaneous) detector with user-swappable multi-sensor cartridges
- Attention grabbing audible, visual and vibrating alarms
- Rugged and water-proof (IP67 rated)
- Enforcer automated calibration and Safelink communication options
- Easy to use, configurable unit with robust built-in pump and data-logging
- Clear, backlit, easy-to-read display
- Disposable or fully serviceable cartridges
- Multi-lingual intuitive menu

Controllers



HA20/HA40/HA71

- 2, 4, 8, 16 channels depending on controller model
- Two standard SPDT common alarm relays for HORN, HIGH, WARN or FAULT
- Approvals: NEMA4X enclosure; Class I, Div. 2, Groups A,B,C,D
- Three independent alarm levels per channel
- Graphic LCD readout displays monitored data as bargraphs, trends and engineering units
- Alarm LED's flash when new and become steady after acknowledged
- Touch-and-magnetic keypad for non-intrusive operation in potentially hazardous locations
- · Rack and wall mount versions
- Modbus RS-485 master and slave communications
- Scalable by linking multiple controllers to connect up to 160 points of detection
- Additional options are available specific to controller models

Universal Transmitter



XNXTM

- Works with Honeywell's full range of gas sensor technologies (Electrochemical, Infrared, Catalytic Bead)
- Expanded communications
 platform with standard HART® plus
 optional MODBUS, FOUNDATION
 Fieldbus™ (pending) or three relays
 (two alarm, one fault)
- Single interface provides complete diagnostic, alarm and gas concentration values
- Supports eight languages (English, Spanish, German, Italian, Portuguese, French, Russian, Chinese)
- · Easy to install, operate and maintain
- Failsafe operation, fast response and long operating life
- Globally certified for hazardous areas