

True Wireless™ Gas Detection

The Gastronics' True Wireless™ Transmitters feature a unique patented* method of wireless monitoring that eliminates not only the high installation costs of hardwired systems, but the cost of wireless RTU's.

The Gastronics' True Wireless™ Transmitters incorporate up to a 5 watt UHF (450-470mHZ) radio directly into the gas transmitter, thus eliminating the need for wiring to a Remote Radio Terminal Unit (also known as an RTU). A typical radio telemetry system using RTU's, while reducing significant installation costs, still requires both the high cost of the RTU as well as the installation costs to wire the gas monitor to the RTU. The True Wireless™ Transmitters go a step further by completely eliminating the need for the RTU as well as the associated installation costs.

The Gastronics' True Wireless™ Transmitters are designed to radio transmit PPM/LEL levels, battery voltage and alarm information directly to one or more Gastronics GT-4000 Controller(s). The keypad on the face of

the True Wireless™ Transmitter allows the user to configure site addresses, trigger on change levels, analog filtering, STEL/Hi/HiHi alarms, ppm dropout, and security access code. A separate maintenance security access code allows an authorized maintenance person to access sensor calibration settings from the same keypad. The True Wireless™ Transmitter radio strength is sufficient to penetrate in and out of buildings, throughout an industrial plant facility and miles beyond.

Sensor type, ranges and resolution are set via the use of internal jumpers in the True Wireless™ Transmitters. For specifications on types of sensors, refer to the Gastronics' TR-Series product literature.



AVAILABLE GASES

Chlorine	Diborane
Ammonia	Methyl Mercaptan
Hydrogen Fluoride	Hydrogen Sulfide
Hydrogen Cyanide	Sulfur Dioxide
Phosphene	Hydrazine
Fluorine	Silane
Chlorine Dioxide	Germane
Phosgene	CO2 (Infrared)
Carbon Monoxide	
Ozone	

EXPLOSION PROOF VERSIONS

Combustibles (Catalytic)
Combustibles (Infrared)
Carbon Dioxide (Infrared)
Hydrogen Sulfide

RELIABILITY

The Chlorine Institute, Inc. states in it's November 1997 Pamphlet 73 on Atmospheric Monitoring Equipment for Chlorine, "Radio transmissions are very reliable if quality radios/modems are used." The Gastronics' True Wireless™ Transmitters are considered extremely reliable since there are no cutting corners through the use of low powered, non-licensed radios. The remote True Wireless™ Transmitters are supervised for communications by thirty minute polling.

SENSOR BENEFITS

(Chemical sensors only)

- No Temperature Effects
- No Humidity Effects
- No Periodic Zeroing Required
- No Background Current
- Greater Chemical Selectivity
- No Drying Out
- No Taking On Moisture
- No Costly Recharges or Refilling of Electrolyte



GT-4000 PROGRAMMABLE LOGIC CONTROLLER

The master controller for the True Wireless™ Gas Transmitters is the Gastronics GT-4000 Programmable Logic Controller. The GT-4000 can be configured for both hardwired and wireless devices and can be equipped to output Modbus, ASCII, RS232, RS485, Speech Auto-dialer, 4-20mA and Relays. Additionally, the GT-4000 can accept analog and digital inputs and accommodate data storage.



TRUE WIRELESS™ SPECIFICATIONS

Housing	Nema-4X
Temperature Range	-40 to +50C
Power Options	115/220VAC, 12 VDC, or Solar Powered
Power Consumption	40 mA Nominal, 1000 mA during transmission
Internal Battery	12VDC, 5 Amps
Radio Power	2 or 5 Watts
Antenna Gain	3 db
Radio Frequency	UHF Licensed, Provided by Gastronics
Keypad Settings	Trigger on Change, Drop Out, Analog Filtering, Hi/HHi/STEL Alarms, Remote Site Address, Master Site Address(s).
Relays	2 Open Collectors for Hi, HiHi Alarms
Baud Rate	4800
Miscellaneous	Patented, Continuation Patent Pending



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