RC SYSTEMS
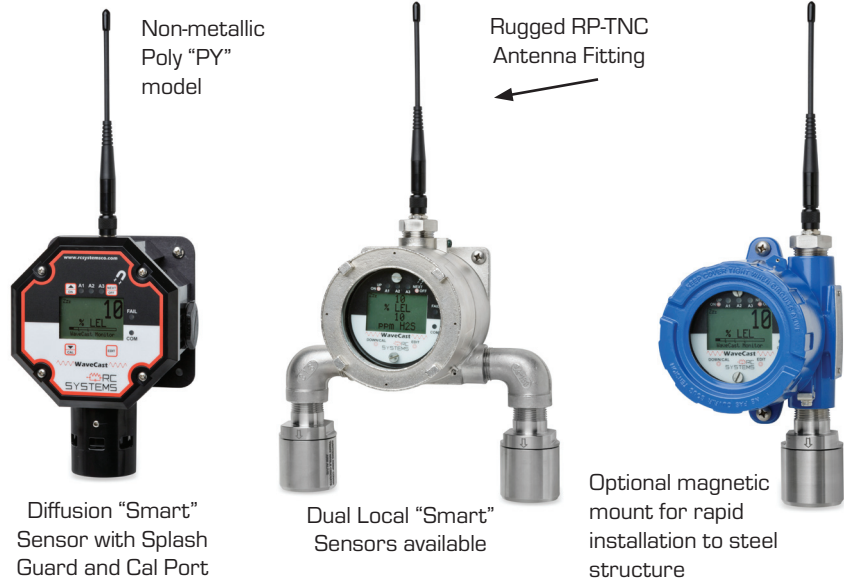
WaveCast Wireless Gas Monitor
Battery Powered Monitor for Hazardous Gas Detection

FEATURES:

- WCM's send monitored alarms & gas readings wirelessly to our 3 channel WaveLink Receiver (WLR)

- WCM's support single or dual and local or remote "Smart" temperature compensated sensor modules

- All sensor signal conditioning is performed on the sensor module

- 3 alarm levels, gas range and other parameters are stored in each WCM's Smart Sensor module and may be edited by the user

- WCM's are truly wireless; powered by an easy to change lithium D cell battery lasting 6-9 months

- WCM LCD readouts include Eunits, bar graphs, and 1 hour trends

- License free 900MHz or 2.4GHz FHSS client/server network

- 5 front panel WCM LEDs indicate alarms and communication status

- Certified for Cl 1 Div 2 locations

- Available either in rugged cast aluminum or economical UL-94 poly enclosures

- Magnetic keypad allows "one man" sensor calibration in hazardous areas without area declassification

- Password protected security levels prevent unauthorized configuration

Non-metallic Poly "PY" model

Rugged RP-TNC Antenna Fitting

Diffusion "Smart" Sensor with Splash Guard and Cal Port

Dual Local "Smart" Sensors available

Optional magnetic mount for rapid installation to steel structure

WaveNet is a license free Frequency Hopping Spread Spectrum (FHSS) Client/Server wireless monitoring system with integral 900 MHz or 2.4 GHz radio modules. Up to 26 WaveNet networks may be co-located within the same area. Each wireless network consists of at least one 32 channel WaveLink Receiver (WLR) and as many as 32 WaveCast Monitors (WCMs). The WaveNet product family also offers a WaveRelayer (WNR) for activating alarm bars and annunciators, a hand-held Site Survey Toolkit (SST) and ST-97 Modem/Repeater.

The WaveCast Monitors pictured above utilize long life "smart" sensors for detecting hazardous gases and transmit readings and alarm conditions wirelessly to WLR's and WNR's. Operator interface is via the magnetic keypad so it is never necessary to open the enclosure to calibrate or configure WaveNet products. WCM's support single or dual gas configurations and offer an optional 15 feet sensor separation kit to make it easier to detect lighter and heavier than air gases.

The Dual Sensor capability allows monitoring of 2 different toxic gases or 1 toxic and 1 combustible gas with each WCM.

On screen radio status icons indicate "Server In-Range", "Server Out-of-Range", "Server Previously Out-of-Range" and "Low Battery" conditions. No potentiometer or jumper settings are required. Cycling of power and configuration are via menus accessed using the LCD / magnetic keypad without opening the enclosure. A "CAL MODE" provides on-screen prompts when to apply Zero/Span gases during calibrations. A "Sensor Life" bar graph updates after each SPAN calibration indicating when to install a new sensor. The one-hour trend screen shows rate of change of gas exposures. Modular design affords efficient installation and plug in sensors allow changing target gases even after installation.

WaveNet is a user friendly and easy to install complete GAS DETECTION SOLUTION.

SPECIFICATIONS

DISPLAY
64 x 128 pixel LCD

AMBIENT TEMPERATURE RANGE
-40 - 60 degrees C

POWER SUPPLY
3.6V lithium D cell battery
10 - 30 VDC at less than 2 watts (optional)

APPROVALS
CSA certified to C22.2 No. 213-M1987 and
ANSI/ISA-12.12.01-2010

PERFORMANCE 900MHz
- Frequency range: 902 - 928 MHz with 50 hops
- Transmit power (selectable): 10mW-1W / 0-30dBm
- Indoor/urban range: Up to 3000 feet with 2dBi dipole antenna
- Outdoor RF LOS range: Up to five miles with high-gain antenna
- Receiver sensitivity : -100dBm

PERFORMANCE 2.4GHz
- Frequency range: 2400 - 2483.5 MHz with 42 hops
- Conducted transmit power is 125mW / 21dBm
- Indoor/urban range: Up to 1500 feet with 7dBi collinear antenna
- Outdoor RF LOS range: Up to three miles with high-gain antenna
- Receiver sensitivity: -98dBm

ORDERING INFORMATION

Configuration Example: WCMAL90-1-3-HS-ME describes a:
WaveCast 900 MHz wireless monitor in aluminum enclosure, rubber dipole antenna, and dual local sensors configured for H2S and LEL of methane.

WaveCast Monitor Order Guide

WCMAB -C- D -E- F	
"A"	Enclosure Type AL= Aluminum PY= Poly
"B"	Frequency 24= 2.4 GHz 90= 900 MHz
"C"	Antenna 1= Rubber 3= Yagi 4= XP 5= Spring
"D"	Sensor Head Configuration 1= Local 2= Remote 3= 2 Local 4= 1 Local and 1 Remote 5= 2 Remote
"E"	Sensor 1 Pick sensor from List on Right
"F"	Sensor 2 Pick sensor from List on Right 00=None

Available Sensor Types

	Electrochemical		Low Power IR (Series 4)
AM	*Ammonia	CX	Carbon Dioxide 0-5%
AR	Arsine	ME	Methane LEL
CX	Carbon Monoxide	PR	Propane LEL
CH	*Chlorine		
CD	*Chlorine Dioxide		
EO	Ethylene Oxide		
FL	*Flourine		
HY	Hydrogen		
HC	*Hydrogen Chloride		
HN	*Hydrogen Cyanide		
HF	*Hydrogen Fluoride		
HS	Hydrogen Sulfide		
NO	Nitric Oxide		
ND	Nitrogen Dioxide		
OX	Oxygen		
OZ	*Ozone		
SD	Sulfur Dioxide		

Specify Range when Ordering
*Reactive gases require use of sensor head without stainless steel flame arrestor