

# WaveNet

## Wireless Gas Monitoring System

### SenSmart 7000 Monitor



### “WaveLink Receiver”



The “WaveNet” Wireless Monitoring System consists of 1-32 battery-powered **SenSmart 7000** “WaveCast Monitors” (WCM) and at least one 32 channel “WaveLink Receiver” (WLR). An optional module is available to add data logging, second wired and wireless Modbus port, plus a Wi-Fi port with web-server. The Wi-Fi allows remote HMI functionality via any web enabled device. This means WaveLink Receiver allows responders to view real time and historical data on smart phones and tablet devices prior to entering a hazardous area! This new generation WaveNet wireless system is designed for easy deployment of both fixed installation and temporary site monitoring.

#### FEATURES HIGHLIGHT - SenSmart 7000

- Supports single or dual and local or remote “Smart” temperature compensated sensor modules
- Alarms, gas range and other parameters are stored in the Smart Sensor module and may be edited by the user. Changes are periodically broadcast to the WaveLink Receivers to insure identical readings at all locations
- Allows restore of factory settings from Smart Sensor plus backup and subsequent restore of user settings if parameters are accidentally lost
- Password protected with LOW and HIGH security levels
- Easy to change lithium battery
- Compatible with low powered LEL infrared sensor
- Three adjustable independent alarm levels per sensor
- Readouts include Eunits, bar graphs, 1-hour trends
- “Legacy” setting makes **SenSmart 7000** devices compatible with all RC Systems controllers
- Magnetic mount option available
- License free 900MHz or 2.4 GHz FHSS client and server network
- 5 front panel LEDs indicate alarms and communication status
- Suitable for Division 2 hazardous locations

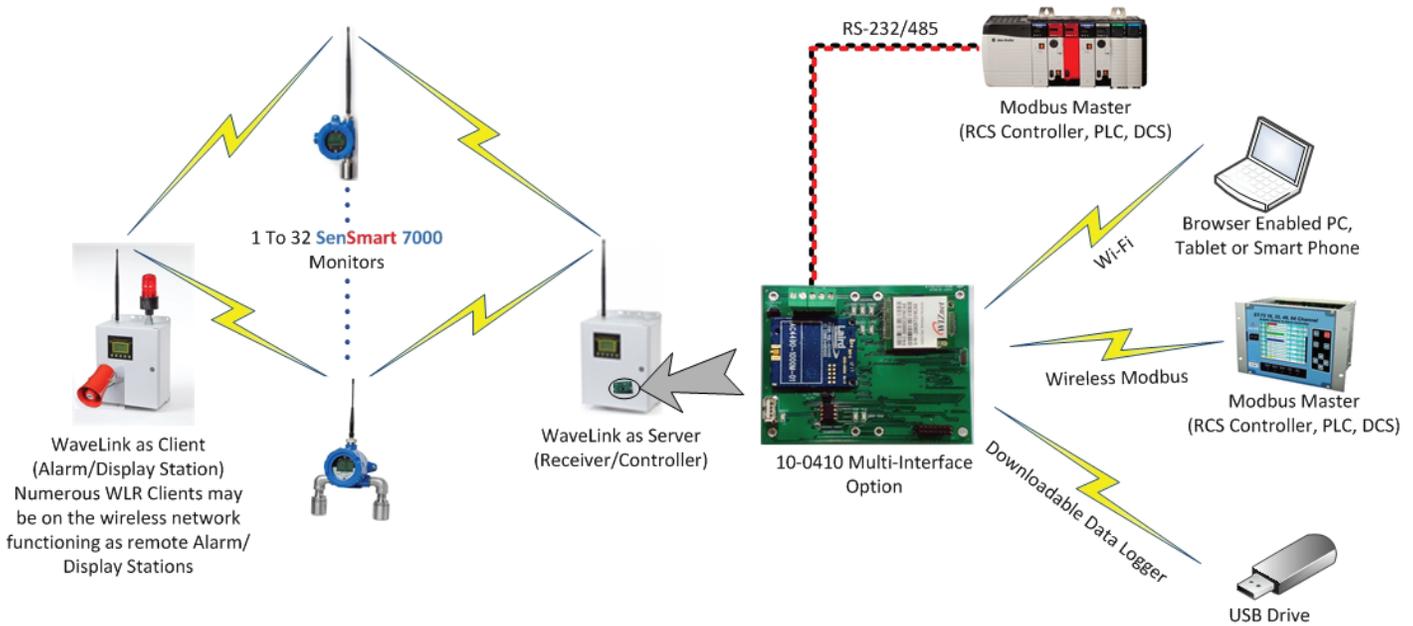
#### WaveLink Receiver (WLR)

- Displays monitored readings and alarms from 1 to 32 **SenSmart 7000** Monitors
- Requires little setup since all channel parameters are periodically received from **SenSmart 7000** Sensors via the wireless network
- Includes 8 programmable 5-amp relays to control lights, horns, fans etc
- “Acknowledge” feature allows audible devices to be silenced during alarms
- Graphic LCD displays large Eunits and bar graph for each active channels
- Clock / Calendar time and date stamps “Event Log” sensor items including Power-Up, Alarms, Calibration and Com Errors
- 10-30 VDC or 100-240 VAC standard power. Easy to solar power
- Offers both 900 MHz and 2.4 GHz FHSS models
- Touch and magnetic keypads are standard for non-intrusive operation
- Password protected with LOW and HIGH security levels

#### 10-0410 MULTI-INTERFACE OPTION

- Wi-Fi access point for web enabled devices to view WaveLink embedded webpages including real time and historical sensor readings, channel parameters, and remote setup capability
- Data logger stores more than 1 year of readings and alarm history
- RS-485 and wireless Modbus Slave port for transmitting WaveNet data to our ViewSmart 1600+ and ViewSmart 6400 Controllers

## SYSTEMS SETUP



A typical WaveNet FHSS Client / Server wireless monitoring system consists of one WaveLink Receiver (WLR) configured as the network's Server, receiving wireless data from up to 32 Single Gas, or 16 Dual Gas, **SenSmart 7000** Monitors (**SenSmart 7000**'s). Additional WLR's may also receive the same **SenSmart 7000** data and act as remote alarm stations and displays, but must be configured as a Clients since only one Server is permitted per network. **SenSmart 7000**'s are powered by an internal lithium battery while WLR's require either 100-240 VAC or 10-30VDC and are very easy to solar power.

The 10-0410 Multi-Interface Module is a plug in PCB option which adds a tremendous amount of functionality and is easily added to WaveLink Receivers. Features added by the 10-0410 include Data Logging of > 1year of readings and alarms, a WiFi web server sending monitored data to browser enabled smart devices, and RS-485 / FHSS Wireless Modbus slave ports for transferring data to Modbus master devices such as RC Systems ViewSmart 6400 controller.

## OPTIONS

- 10-0289 Antenna, 900MHz 8 dBi Fiberglass Omni Base Station
- 1000-2312 Antenna, 2.4GHz 9 dBi Fiberglass Omni Base Station
- 1000-2310 Antenna, 900MHz 9 dBi Yagi Directional
- 1000-2309 Antenna, 2.4GHz 12 dBi Yagi Directional
- 1000-2193 Antenna, 900MHz, Dipole, Division 1
- 1000-2301 Antenna, 2.4Ghz Dipole, Division 1
- 10-0334 30 Watt Solar Power Supply with 55AH Battery; Division 2

## REMOTE SENSOR KIT



Shown with 10-0247 stainless steel sensor head

The 10-0411 Remote Sensor Kit allows smart sensors to be mounted up to 15 feet away from the **SenSmart 7000**. **SenSmart 7000**s may be configured as single or dual sensor monitors so either one or two 10-0411 Remote Sensor kits may be connected to each **SenSmart 7000**. When combined with the 10-0247 Stainless Steel sensor head, the 10-0411 is suitable for Division 1 hazardous locations.