



## General Description

The IntelliGate™ is a low cost wireless receiver and integrated Ethernet or Wireless Ethernet (WiFi) Web Server for collecting data from IntelliSensor™ units. All data collected by IntelliGate™ units can be viewed with a standard web browser or relayed to Raptor Web Software™ for Enterprise Wide Data Mining applications. The IntelliGate™ unit has a built-in RF radio using the Zigbee/IEEE 802.15.4 standard for wireless communications. Employing a 2.4 GHz standards based wireless transmitter and receiver, the IntelliGate™ is FCC, IC, and CE approved for use in the United States, Canada and Europe. The IntelliGate™ can communicate with IntelliSensors™ at distances of up to 1 mile and as part of a meshed network the wireless distances can be further increased.

The IntelliGate™ is a data logger and communications device in one. It uses 128-bit AES encryption to receive data and alarms from IntelliSensor™ units which can then be stored based on time or change in the value of a sensor reading ( $\Delta T$ ). These parameters are configurable to allow realistic acquisition of different types of sensor data. Data and alarms can be encoded into an XML file and transferred to a web server using secure communications (using HTTPS Post).

## IntelliGate™ Series Wireless Acquisition Module



IntelliGate™ Model IG1-1000 Shown



## Applications

Applications include, but are not limited to: food service (where the IntelliSensor™ and IntelliGate™ units can assist in monitoring and preventing HACCP violations), heating, cooling, refrigeration, HVAC, medical, and industrial.

Multiple IntelliSensor™ units can communicate to an IntelliGate™ Wireless Receiver for local data and alarm storage. Data and alarms can then be encoded into an XML file and transferred to an Enterprise Web Server using HTTPS Post. Using HTTPS Post and an XML file allows for an extremely secure communications method for transferring data to a central server like Raptor Web Software™, without having to make any changes to firewalls or internet security devices. Using IntelliSensors™, IntelliGates™, and Raptor Web Software allows you to have a full and complete data acquisition system.

## Features

- Enclosure Size 4.250" x 3.000" x 1.375"
- Supports all types of IntelliSensor™ units
- Integrated 2.4 GHz Zigbee/802.15.4 DSSS Radio
- Up to 1 mile wireless range
- 128-bit AES encrypted communications with IntelliSensors (optional)
- Ethernet or Wireless Ethernet (802.11b) Communications
- Supports meshed network for increased range
- Built-in Web Server to display current and past sensor data and alarms
- Push data to Enterprise Servers using HTTPS and XML
- Multi-level Password Support
- Configurable Transmission Rate
- Flame retardant ABS plastic enclosure with mounting flanges
- Small Size
- FCC, IC, and CE agency certified for worldwide operation
- Conformal Coated board for moisture rich operating environments
- Internal or External Whip Antenna
- Industrial Temperature Rating (-40° C to 85° C)
- CRC error checking on all data packets for reliable connection
- NAFEM Data Protocol Compliant