

## **SYSTEM OVERVIEW**

The Sensa-LINX Detector Networking System is equipment to allow a collection of sensors to be combined into a network, wirelessly connected to a base station to provide centralized control and monitoring of the data. Each sensor is connected to a Sensor Node (Radio Modem) which communicates with another Sensor Node (Radio Modem) at the Base Station Node connected to the Laptop PC (Base Station).

This system is intended for remote monitoring of an unmanned perimeter of sensors, monitoring a network of worn sensors as personnel move through an area, collation of data from multiple sensors into a single tactical map, and combinations of the above tasks.

The Laptop PC uses data acquired from the network of sensors to produce standard CBRNE report messages.

The Sensor Nodes (Radio Modems) have built-in Global Positioning System (GPS) receivers that obtain position co-ordinates. The GPS receiver is then disabled soon after start up to conserve battery power. The GPS capability is re-enabled when the Sensor Node's (Radio Modem's) accelerometer detects movement.

Due to operating restrictions in different countries, a number of Sensor Node (Radio Modem) variants are offered. These include an International and Standard 2.4GHz variant, an International and Standard 900MHz variant, and an International and Standard 868MHz variant. Each of these has its own characteristics which can be seen in TABLE 2 Radio Modem Variants.

The Sensa-LINX system can currently interface to the Smiths Detection LCD3.3, LCD Nexus and CAM XTR chemical sensors.