BRUKER

Bruker Daltonics NBC Detection Corp.

Life·Line®
Wireless Monitoring System

● Wireless Chemical Agent Monitoring System

think forward

● The Life·line® Wireless Monitoring System:

Real-time remote monitoring
Designed to meet the needs of extreme or hostile environments two simple switches and a few mouse clicks are all that is required to have real-time live instrument data viewed anywhere there is a network connection.

Compliant wireless technology
Lifeline's adherence to standards compliant wireless technology assures a low probability of interference and the broadest coverage area. Lifeline utilizes an 802.11 WiFi connection between the Dongle and Gateway providing 100 to 400 feet non-line-of-site coverage. The use of WiFi ensures interoperability with other compliant network radio systems. A large number of instruments can be monitored concurrently. The Dongle can also be used in other established WiFi network environments.
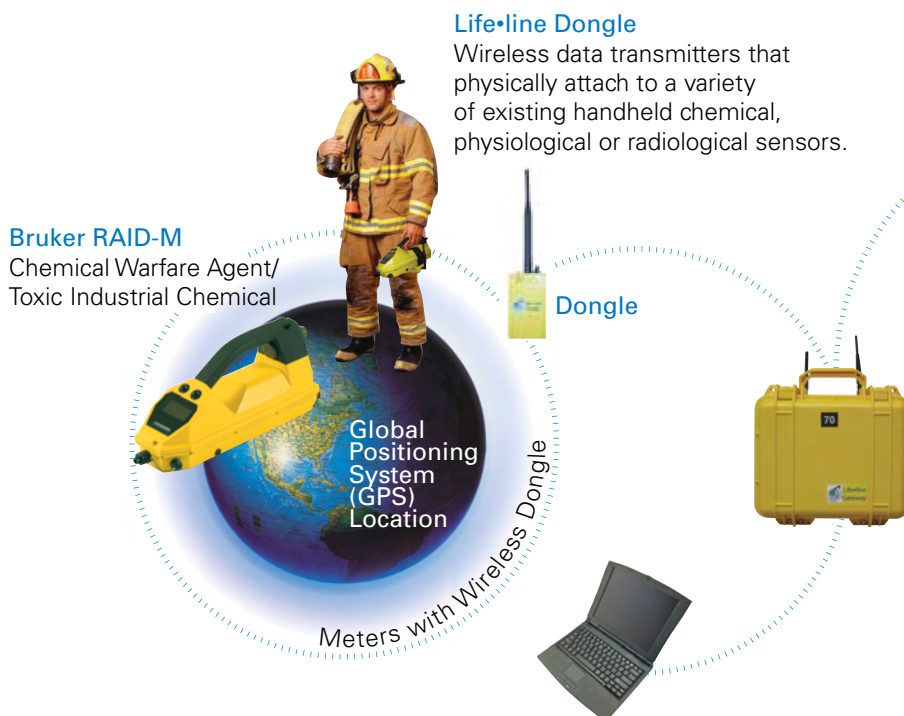
The Lifeline Wireless Monitoring System is comprised of three parts, 1) a Lifeline Dongle which attaches to the instrument and provides a wireless telemetric interface; 2) a Lifeline Gateway that relays the instrument data to either a private or public internet connection; and 3) remote real-time instrument display emulation software.

The Lifeline Dongle
The Lifeline Dongle provides a wireless network connection to meters, sensors and other instrumentation that will allow their real-time reading to be viewed away from the instrument. The Dongle converts information gathered from the instruments data port (serial, IrDA or analog) to a standards compliant 802.11 WiFi network connection. Now being on a network the data can be

Interoperable Systems

Sensor to Software

Life·line Dongle
Wireless data transmitters that physically attach to a variety of existing handheld chemical, physiological or radiological sensors.

Bruker RAID-M
Chemical Warfare Agent/
Toxic Industrial Chemical

Dongle

Global
Positioning
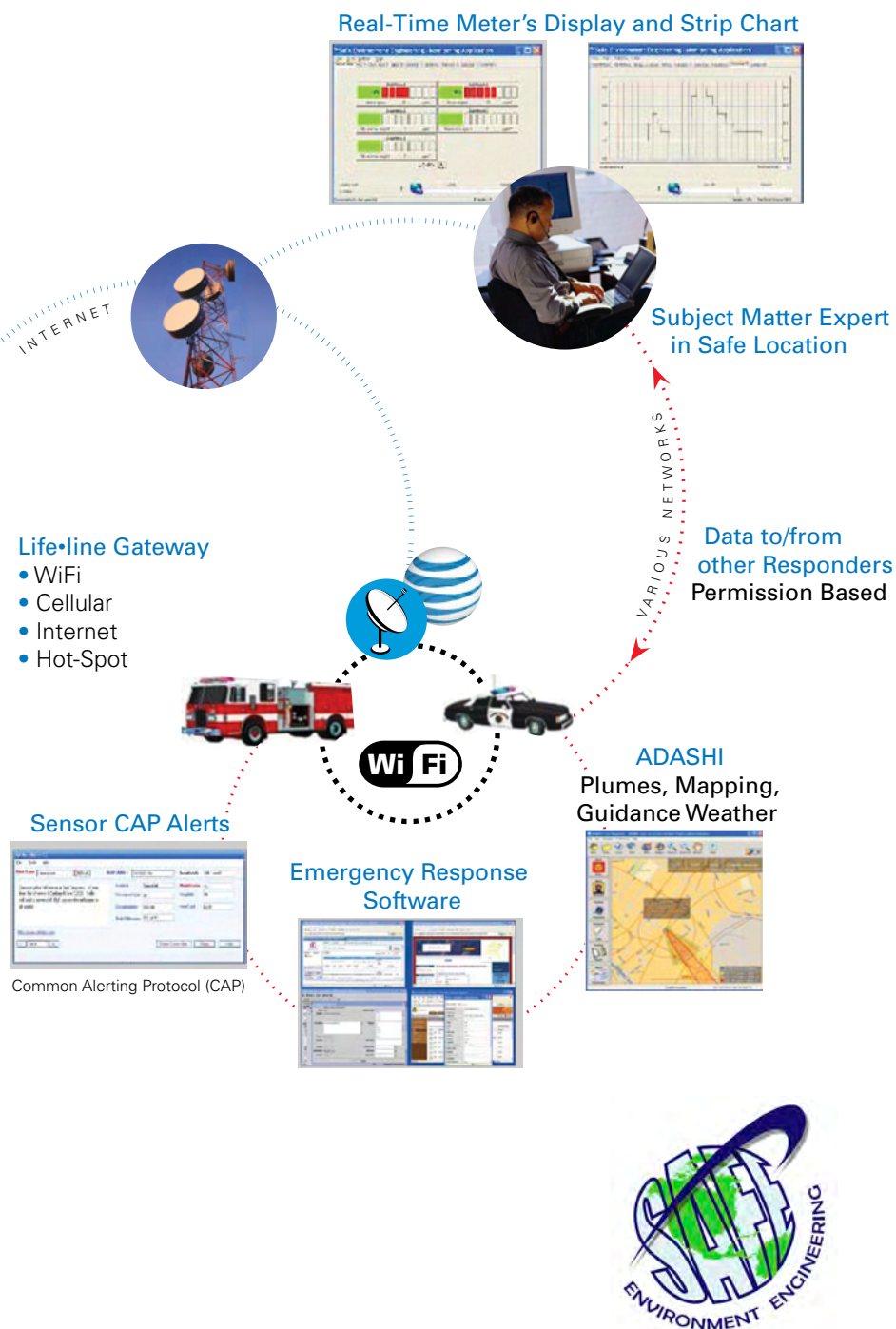System
(GPS)
Location

Meters with Wireless Dongle

Benefits
- Live, real-time instrument readings to any computer anywhere
- Common, interchangeable and simple remote display look and operation
- Experts exchange information instantly
- Threshold alarms/alerts for fast response

Applications
- Entry teams
- Perimeter/fence post monitoring
- Environmental surveys
- Decontamination

Real-Time or On Demand

Real-Time Meter's Display and Strip Chart

INTERNET

Subject Matter Expert in Safe Location

VARIOUS NETWORKS

Life•line Gateway
• WiFi
• Cellular
• Internet
• Hot-Spot

Data to/from other Responders
Permission Based

Wi Fi

ADASHI
Plumes, Mapping, Guidance Weather

Sensor CAP Alerts

Common Alerting Protocol (CAP)

Emergency Response Software

SAFE ENVIRONMENT ENGINEERING

routed to remote viewing applications no matter their location as long as they have access to the network.

The Dongle is encased within a small rugged sealed enclosure and powered by 3 conventional AA batteries. The Dongle can operate for up to 6 hours providing data updates as quickly as once per second. To operate the Dongle connect it to the instrument, toggle the power switch to the on position and verify the connection light.

Lifeline Gateway

In situations requiring an on-demand wireless network, the Lifeline Gateway provides both a local wireless instrument hot-spot and a link to the cellular network for complete instrument data reach-back to any computer having an internet connection anywhere in the world.

The Lifeline Gateway is a portable, self contained, rechargeable combination WiFi access point and cellular modem. All electronics are sealed in a rugged watertight enclosure. The cellular modem allows the Gateway the capability to be used for wireless internet access similar to a home or office router.

Remote real-time display

The remote display software duplicates the faceplate of the instrumentation while also displaying key operational characteristics such as the Dongle battery level and signal quality. Automated audible and visual alarms can be set to user defined or regulatory thresholds. Substance strip charts provide tracking of single or multiple substances. Referenced Library tabs can be selected indicating concentration levels.

Bruker product line
the Life•line Wireless Monitoring System

● Bruker IMS instruments in the USA and its principalities are exempt from radiological safety requirements under NRC License 20-32465-02E.

RAID-M: Handheld/Portable

- Certified under Safety Act by DHS
- Consumables: 500 operating hours
- Survey and response instrument
- Chosen for National Guard WMD CST Teams

RAID-XP: Fixed Site Portable

- Consumables: 4000 operating hours
- 24/7 site monitoring
- Detects chemical vapors and gamma radiation

HAWK

- Detects on the move or stationary
- Detects CWAs and many industrial chemicals
- Scan large areas in seconds
- Uses FTIR technology
- Identifies agents from a stand off distance of yards to several thousand yards
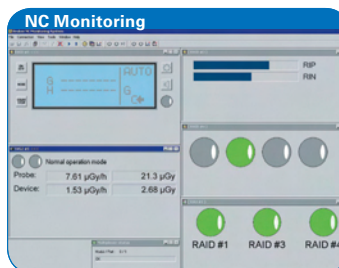
IMS Software Packages

Control and Data System XIM-NT

- IMS instrument control and data acquisition of the detector
- IMS spectra processing and analysis of two- and three-dimensional IMS spectra on the PC
- Substance identification and quantification
- Library Editor for ion mobility spectra libraries

XIM-NT
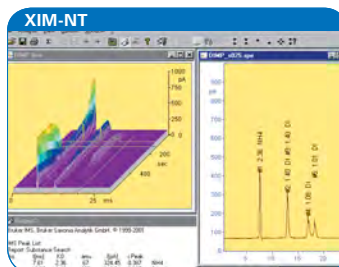
Network Operation with NC Monitoring

Application of several RAID (Rapid Alarm Identification Device) gas trace detectors and Bruker SVG2 radiation meters in one networking system for remote monitoring of hazardous compounds and remote instrument control. The system can be integrated into other control and alarm systems.

NC Monitoring