LARGE AREA CHEMICAL SECURITY

Key Features
- Real-time 24/7 Monitoring
  - Toxic Industrial Chemicals (TICs)
  - Chemical Warfare Agents (CWAs)
- Fixed or Portable Configurations
- Indoor Operation (Outdoor Enclosure Available)
- Low Cost Retroreflectors and Mirrors

Laser Based Chemical Detection

Key Benefits and Advantages
- Operation in the mid-infrared spectrum where most gases have strong and unique spectral signatures
- Greatly increased sensitivity and area coverage compared to current area protection systems
- Expandable library of chemical threats to match specific operational requirements
- No consumables required, allowing for minimal maintenance
- Eye-safe laser beams for operation in areas with people
- Readings every two seconds for rapid detection and warning alerts
LaserWarn™ Principle of Operation

Chemical Cloud Detected

No Chemical Detected

LaserWarn™ Specifications

Maximum Distance
Standard Range: 500-m round-trip

Gases detected
Most Toxic Industrial Chemicals [TICs], Chemical Warfare Agents [CWAs] and other chemicals

Sensitivity
Varies with gas and distance in path [e.g., Sarin at 10 ppb over 500 m]

Response time
2 seconds (typical)

Detection method
Infrared Absorption Spectroscopy

Communication Options
Ethernet; Wireless
Cellular and other options available upon request

Communication Interface
Readily available interface to security systems

Dimensions
Approx. 18 x 14 x 6 inches

Weight
32 lbs

Electrical Power
100 – 240 Volts [50/60 Hz], 20 Watts (typical)

Operating Temperature
10° to 30°C

Range
[-20° to 50°C available with custom enclosures]

Retro-reflector
2-inch diameter (included)