**MULTI-CHEMICAL OPEN PATH GAS DETECTION**

The ChemSight™ multi-chemical, open path IR detector was developed specifically for the protection of building HVAC systems. The system can be installed outside the air flow to avoid flow obstruction. Whether in the air inlet of a building or the return, the ChemSight™ can monitor indefinitely for most chemical threats of interest and trigger an action when a threat is detected.

**FEATURES**

Multi-chemical detection
- Toxic Industrial Chemicals (TICs) and Chemical Warfare Agents (CWAs)
- Upgradeable over the Internet

Low maintenance
- No external air sampling system
- No consumables

Comprehensive SiteProtector™ software and processing algorithm
- Each detector can be monitored remotely
- User-defined actions and alarms
- User-defined chemical detection list
- Large data storage capacity and regular archiving

Indoor and outdoor operation
- -40°C to 60°C
- Harsh environments

Speed and Value
- Fast response - 1 second, followed by 30 second confirmation
- Best value per detected chemical and for cost of ownership

**MORE THAN 120 CHEMICAL PLANTS IN THE US ARE LOCATED AT OR NEAR Densely Populated AREAS, EACH WITH THE POTENTIAL TO AFFECT OVER ONE MILLION PEOPLE EVEN BY A MODERATE RELEASE. SIMILARLY, LARGE QUANTITIES OF TOXIC CHEMICALS ARE TRANSPORTED DAILY THROUGH POPULATED AREAS BY TRUCK AND RAIL WITHOUT SIGNIFICANT PROTECTION.**

**GASEOUS CHEMICAL THREATS**

Many of these chemicals are gaseous under normal conditions, exceptionally toxic (e.g., phosgene), odorless and colorless. When released, they spread rapidly, moving invisibly downwind with minimal dissipation affecting key facilities such as financial institutes, entertainment centers, public transportation terminals or office buildings. In addition to threat to human health and life, chemical release may interrupt vital operations and contaminate critical facilities.

For large buildings and other facilities with central ventilation, the external air inlet or return lines may provide entry points for the spread or release.

**MULTI-CHEMICAL DETECTION**

The ChemSight™ is a multi-chemical, non-contact detector that can provide adequate protection. It can monitor continuously (24/7, 365 days/year) the critical points of most HVAC systems to detect, identify and quantify most Toxic Industrial Chemicals (TICs), Chemical Warfare Agents (CWAs), and Toxic Industrial Materials (TIMs).

Minimum detection levels of most threats are well below the immediately dangerous to life and health (IDLH) level.

**FAST, ACCURATE RESPONSE**

With its fast response (1 sec) and advanced SiteProtector™ software, the ChemSight™ can be programmed to trigger actions that can block the spread of such chemicals either by closing a damper, shutting down the air handler, or simply providing the proper alarm.

The ChemSight™ operates continuously for extended periods with no down time, maintenance calls or false alarms.

**HVAC SYSTEMS MAY PROVIDE ENTRY OR EXIT POINTS FOR CHEMICAL THREATS. CHEMSIGHT™ CAN DETECT & TRIGGER THE PRECAUTIONS TO PROTECT YOUR FACILITY.**

The ChemSight™ detector is a Qualified Anti-Terrorism Technology and has received SAFETY Act designation.
CHEMICALS DETECTED

Types: Wide range of Toxic Industrial Chemicals (TICs), Chemical Warfare Agents (CWAs) and Toxic Industrial Materials (TIMs)

SOFTWARE

General: SiteProtector™ software provides threat evaluation, gas identification, concentration, time stamp and other data for stand alone monitoring or inclusion into industry standard integration software

Diagnosis: Self-diagnoses path obstructions, interferants and detector well-being

Confidence Tester: Internal, software activated relay that confirms detector operation and communication at user defined intervals (daily, weekly, etc.)

SYSTEM

Sensor Type: Infrared absorption

Sensitivity: Varies by vapor; from 200 ppm•m to 2 ppm•m (well below IDLH in typical installations)

Response Time: 1 second

Identification Time: 1-30 seconds

Path Length: 1-30m; 30m-100m

Ongoing Calibration: None

Warranty: One year

Consumables: None

Maintenance: Self-monitoring; no scheduled maintenance

Operation: Continuous

MECHANICAL

Housing Size: Detector: 7” x 7.5” x 22.5” (17cm x 19cm x 57cm) IR Lamp: 14” x 14” x 8” (35cm x 35cm x 20cm) 7” x 7” x 6” (17cm x 17cm x 15cm)

Enclosure Material: Powder Coated Aluminum

Weight: Detector: 13 lbs (6 Kg) IR Lamp: 8 lbs (4 Kg), 4 lbs (2 Kg)

ENVIRONMENTAL

Operating Temp.: -40°F to +140°F (-40°C to +60°C)

Operating Humidity: 0 to 95% RH (non-condensing)

Weatherproof rating: IP66

Certifications: ISO 9001, UL & CE (pending)

ELECTRICAL

Operating Voltage: 120 VAC or 240VAC

Power Consumption: Detector: 25 watts max. IR Lamp: 5 watts to 50 watts max.

Specification subject to change without prior notification