Product Specifications

The ASM Vehicle Monitoring Systems are designed to provide the ultimate sensitivity for vehicle scanning in industrial applications.

ASM/III

Model 6000, 9000 and 12000 Vehicle Monitoring Systems

ASM6000

ASM9000

ASM12000

- Graphic Display
- Language options
- User configurable alarm messages
- Simple to operate and maintain
- Built-in printer
- Modem included

The ASM/III vehicle monitoring systems are designed to utilize industry-proven detector designs. The system uses state-of-the-art, detection algorithms, and advanced, low-noise electronics technology, to provide the perfect solution for industrial vehicle monitoring applications requiring unparalleled sensitivity and reliability.

Detector configurations that provide both vertical coverage of the vehicle (detector height) as well as dwell time (detector width) have been cornerstone of ASM detector designs since 1987. These large-area plastic scintillation detectors are shock-mounted and housed in lead-lined, NEMA rated stainless steel detector enclosures, and are proven to withstand the rigors of industrial vehicle monitoring applications in the harshest environments.

Data analysis and management is processed by the ASM/III System Control Unit and is available in two configurations; a wall mountable unit, incorporating an industrial grade PC or a desktop POD and commercially available PC. Designed to be operated with little or no operator intervention, the ASM/III SCU features simple, one-button response to alarm conditions, while providing detailed scan and alarm data at the request of the operator. A color graphic display allows the viewing of detector data, alarm history and location of the detected source in the vehicle.

System Specifications

DETECTOR ASSEMBLIES

- ASM6000 - 2 detector modules
- ASM9000 - 3 detector modules
- ASM12000 - 4 detector modules

Detector material
- Premium plastic scintillator

Radiations detected
- Low, medium and high energy gamma emitters
- For example, ^{241}Am, ^{60}Co, ^{137}Cs, ^{921}Ir, ^{226}Ra/Th, also neutrons

Detection volume
- Over 49.2 L (3000 in^3) per detector module; 2 detectors/module

Detection surface area
- Over 0.9 m^2 (1500 in^2) per detector module

Vehicle separation
- 4.84 m (16 ft) or less for optimum performance, (14 ft recommended)

Electronics
- Remote dual channel, R5485 controlled, intelligent high-voltage/bias/amp. digitizer electronics

Vehicle speed sensors
- Heavy duty industrial grade photobeams with cowling for weather and damage protection

Cable & Communication
- Remote controlled data transmission through 2 independently shielded 20AWG twisted pair cables

Housing
- Lead lined, stainless steel, weatherproof (NEMA rated) with gasketed, hinged, coated aluminum access door

Temperature ranges
- -40 °C to 50 °C (-40 °F to 122 °F)

Relative Humidity
- 10 to 95% RH

Dimensions
- 183 x 91 x 30 cm (72" W x 36" H x 12" D)

Weight
- 340 kg (750 lb) per assembly

Installation
- Mounting hole pattern for installation on client-provided I-beams

CONTROL UNIT

Sensitivity
- Maximum sensitivity is set automatically
- Radiation increases equivalent to 5-10% of background are detectable

Vehicle speed
- up to 8 kph (5 mph) with audible and visual alarms if the limit is exceeded

Indicator lights
- Panel Lights: ready (green), wait (amber), alarm (red)
- Illuminated controls: alarm override (amber), toggle display (green), alarm acknowledge (red)

Simple operator control
- A single push-button illuminates when a radiation alarm occurs
- Pressing the push-button silences the alarm and resets the system

Background compensation
- Automatic

Phone modem
- Telephone link to easy maintenance teleservicing network

Other controls
- Power ON/OFF
- keyboard provided for system setup, (password protection, self-test & maintenance) but not required for day-to-day operation

Self-diagnostics
- Detector operation, wiring integrity and photocell alignment are monitored by internal self-tests
- For added reliability, separate hardware monitors the microprocessor

Mountings
- Wall-mounting is standard
- POD/ PC version designed for desk mount

Temperature range
- 4 °C to 35 °C (40 °F to 95 °F)

Relative humidity
- 10% to 75%

Dimensions of control unit
- Wall-mounted: 380 x 600 x 204 mm (15"W x 24"H x 8"D)
- POD (PC not included): 400 x 104 x 255 mm (15.75"W x 4"H x 10" D)

Power:
- 117 Vac, 60 Hz or 220 Vac, 50 Hz

Cable
- NEMA 15-5 3 terminal plug on 1.8 m (6 ft) lead

SYSTEM SHIPPING WEIGHT:
- ASM 6000: 909 kg (2000 lb)
- ASM 9000: 1409 kg (2900 lb)
- ASM 12000: 1818 kg (3800 lb)

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