

The ASM vehicle monitoring systems are designed to provide the ultimate sensitivity for vehicle scanning in industrial applications.

ASM/II

Model 3000E, 4500E and 6000V
Vehicle Monitoring System



ASM-6000V/II

ASM-4500E/II



ASM-3000E/II

- Alphanumeric display
- Built-in printer
- Modem included
- Simple to operate and maintain



The ASM/II vehicle monitoring systems are designed to utilize industry-proven detector designs, state-of-the-art detection algorithms, and advanced, low-noise electronics technology. This combination provides the perfect solution for vehicle monitoring applications, requiring the lowest possible alarm thresholds. The ASM/II vehicle monitoring systems offer 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 the 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/II System Control Unit, which is designed to be operated with little operator intervention. The ASM/II SCU features simple, one-button response to alarm conditions while providing detailed scan and alarm data via the built-in printer.

ASM Specifications

DETECTOR ASSEMBLIES

ASM3000E - 2 detector modules

ASM4500E - 3 detector modules

ASM6000V - 4 detector modules

Detector material:

- Premium plastic scintillator

Radiations detected:

- Low, medium and high energy gamma emitters, for example, ²⁴¹Am, ⁶⁰Co, ¹³⁷Cs, ¹⁹²Ir, ²²⁸Ra/Th, also neutrons

Detection volume:

- Over 23 liters (1400 in³) per detector module

Detection surface area:

- Over 0.45 m² (700 in²) per detector module

Vehicle separation:

- 4.8 m (16') or less for optimum performance, (14' recommended)

Electronics:

- Remotely controlled, high-voltage supply, photomultiplier/voltage divider assembly, pulse/height discriminative, and line drivers

Vehicle speed sensors:

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

Cable & Communication:

- Belden type 9777 multiconductor, OD 0.82 in. nom. (Weatherproof conduit recommended)

Housing:

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

Temperature ranges:

- -35 °C to +50 °C (-31 °F to 122 °F)

Relative Humidity:

- 10 to 95% RH

Dimensions:

- 183 H x 45 W x 30 D cm (72" H x 18" W x 12" D)

Weight:

- 181 kg (400 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 8-10% of background are detectable

Vehicle speed:

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

Indicator lights:

- Panel Lights: ready (green), wait (amber), alarm (red)

Illuminated controls:

- 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; 12-key lockable numeric keypad for system, setup, self-test and maintenance (not required for 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

Temperature range:

- 4 °C to 35 °C (40 °F to 95 °F)

Relative humidity:

- 10% to 75%

Dimensions of wall-mounted control unit:

- 600 H x 380 W x 204 D mm (24" H x 15" W x 8" D)

Power:

- 117 V ac, 60 Hz or 220 V ac, 50 Hz

Cable:

- NEMA 15-5 3 terminal plug on 6' lead

SYSTEM SHIPPING WEIGHT:

ASM 3000: 455 kg (apx. 1000 lb)

ASM 4500: 682 kg (apx. 1500 lb)

ASM 6000: 864 kg (apx. 1900 lbs)

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