

Vehicle Roadway Monitors

VRM-5

Beta-global positioning vehicle roadway monitor



VRM-6

Gamma-global positioning vehicle roadway monitor

Description

Model VRM-5

TSA's vehicle roadway monitor system, model VRM-5, was developed to meet a requirement to survey roadways for contamination from beta particles. The system consists of a four wheel electric utility vehicle, a towed detector array, a Trimble GPS receiver, and a PC based controller.

The Trimble GPS receiver can accept real time differential correction from several sources. When the system is shipped from the factory, it is set up to receive subscription satellite differential correction from OmniSTAR service in Houston, TX. This service provides sub-meter accuracy for an annual subscription fee.

Due to the requirement for beta sensitivity, the faces of the detectors are covered in very thin mylar. This necessarily restricts the system to use only on clean, paved areas. The system may be driven to the work area with the detector shields in place, and the detector height set to the transit position.

When the survey is begun, the computer takes control of the vehicle speed, and will survey the area at the fastest possible speed that provides the required sensitivity.

Model VRM-6

TSA's vehicle roadway monitor, model VRM-6, was developed to meet a requirement to survey a large area for gamma contamination. The system consists of a Polaris Ranger 6x6 all terrain vehicle with rear mounted radiation detector array, a Trimble GPS receiver, and a PC based controller.

The Trimble GPS receiver can accept real time differential correction from several sources. When the system is shipped from the factory, it is set up to receive subscription satellite differential correction from OmniSTAR service in Houston, TX. This service provides sub-meter accuracy for an annual subscription fee.

Specifications

Model VRM-5 SPECIFICATIONS

- SENSITIVITY: 5,000 DPM ¹³⁷Cs in a 20 µR/hour background
- DETECTS: Beta
- SPEED: Cruise: Maximum 9mph (14 kph) Survey: Maximum 2fps (0.61 mps)

Model VRM-6 SPECIFICATIONS

- DETECTS: Gamma

Applications

Model VRM-5

The vehicle roadway monitor system, model VRM-5, was developed to meet a requirement to survey roadways for contamination from beta particles.

Model VRM-6

The vehicle roadway monitor VRM-6 was designed to meet a requirement to survey a large area for gamma contamination.