

AIM Advanced Intrusion Detection Presence Sensing Mat System

AIM is a specially constructed, heavy-duty four-wire pressure sensing mat with conductive plates, designed to be used in both underground and outdoor rail stations, tunnels and grade crossings to protect against unauthorized intrusions or to alert a train operator if a vehicle is stopped on the tracks.

- AIM is a simple, normally open, normally closed contact switch embedded in a ruggedized self-extinguishing presence sensing mat. When the specified minimum weight (66lbs or 30kg) is applied to the mat, the contact closes. This sends a signal to the mat and/or network controller which, in turn, sends an intrusion alert notification to a specified location.
- Each mat presents four wires to the controller. This provides the redundancy required to monitor the wiring for open circuits due to physical damage to the wires while continuing to monitor pressure changes caused by movements of individuals and vehicles.
- Mats are custom made to fit your specific protection area and use a quick disconnect for easy individual replacement.
- An AIM zone can range from as little as 6 feet (1.83 meters) up to 150 feet (45 meters). AIM can be easily installed between tracks or a street grade crossing for maximum detection zones.
- Security operators can follow someone's movements from zone to zone using integrated AIM mats with our i100 (standalone) or MPS-235 (rack mount) Network Interface Controller and Vantage Notification Software.
- The AIM network controllers and software interface with virtually any new or existing security system for camera control and external passenger notification. The sensing capability is completely immune from the weather, environmental conditions and train vibrations, eliminating false alarms.





SPECIFICATIONS

Model Number:	TVAIM-001
Standard Mat Sizes:	12 to 48 in. width / 12 to 72 in. length
Custom Mat Sizes:	From 8 in. up to 48 in. width / From 8 in. up to 72 in. length
Mat Color:	Black with Yellow stripe
Detection Sensitivity:	Activation force of 66lbs (30kg) (8.5 lbs/in.2) per ANSI/RIA 15.06-1999, ISO 13856-1:2001, ANSI B11.19-2003, and CSA Z432-04
Detection Area:	6' (1.83m) zone up to 150' (45m) zone
Construction:	Single-piece molded anti-slip PVC.
Detection:	24 gauge galvanealed sheet steel conductive plates
Crush Resistance:	Static Load: 122.5 kg/in.2 (270 lbs/in.2) Rolling Load: 122.5 kg/in.2 (270 lbs/in.2)
Mechanical Life:	1 x 10 ⁶ operations
Mat Connection Cable:	18-gauge, 4-conductor, 16-strand, 300 VAC, with MC12DC male single key connector; 5 m or 10 m long
Weight:	Approx. 24.4 kg/m ² (5 lbs/ft. ²)
Controller Rating:	NEMA, Safety Category 3
Controller Power:	24 VDC or with universal power supply 100 to 240 VAC
Protection & Flammability:	IP67 against dust and the effect of immersion between 15cm & 1m. Self-extinguishing, meets UL 94VO
Operating Temperature & Humidity:	-35 to 150° F (-37 to 66°C), 0-100% RH
Mat & Controller Standards:	ANSI/RIA 15.06-1999 (R2009), ANSI B11.19-2010, OSHA 1910.21(b), CSA Z432-04, EN 1760-1:1998 (with MC3, MC4 or MC6 mat controller)
Warranty:	Limited 2-year