



OVERVIEW

The High Security Tailgate System was designed for use in areas where the highest level of tailgate detection is required. This unit provides three access levels to monitor both pedestrian and vehicular traffic.

In the drawing (left), the gray represents a vault entrance, the blue represents the steel posts housing the electronics, and the red represents the sensor beams.

An optional Overhead Sensor Array for side-by-side detection is available.

SYSTEM OPERATION

The tailgate system monitors access control inputs, multiple sets of thru-beam infrared sensor pairs to monitor pedestrian and automatic guided vehicle (AGV) traffic through a vault or other protected door. The access control inputs provide three different levels of access through the sensing area:

- **Momentary Valid Card Input** Allows one person to pass through the sensing area for each card read. Passing through the sensing area in the wrong direction will generate an alarm.
- **Momentary AGV Card Input** Allows an AGV to pass through the sensing area. The AGV entry allows extended time for AGV passage without generating an alarm. Passing through the sensing area in the wrong direction will generate an alarm.
- **Maintained Bypass Input** Allows complete free access through the sensing area without generating an alarm. The bypass input also resets an alarm condition.

TECHNICAL SPECIFICATIONS

Power	12 VDC @ 3 Amps.
Inputs	<p>2 Momentary (1/4 - 1/2 sec.) normally open valid card inputs, entry and exit. Closing these inputs allows one person to pass through the sensing area.</p> <p>2 Momentary (1/4 - 1/2 sec.) normally open AGV card inputs, entry and exit. Closing these inputs allows an AGV to pass through the sensing area.</p> <p>1 Maintained normally open bypass input. Closing this input places the tailgate system into bypass mode, no alarms are generated.</p>
Outputs	<p>1 normally closed alarm relay, rated at 1/2 Amp. @ 30 VDC.</p> <p>1 normally closed bypass status relay, rated at 1/2 Amp. @ 30 VDC.</p> <p>2 one-gang display units (entry and exit) contain a red LED to indicate armed status, a green LED to indicate access granted, and a sounder to beep once with valid card presentation. The sounder is on during alarm.</p>
Sensors	Three to seven pairs of thru-beam infrared sensors. Through beam miniature photoelectric sensors. Effective beam width is 5.3mm, maximum distance is 33 feet. Infrared translucent Plexiglas windows hide the locations of the sensor pairs.
Mounting	<p>Sensors and control electronics are mounted in a 6" x 8" steel post welded to a 12" x 12" steel plate that is bolted to the floor. The post will be tall enough to provide full coverage of the vault door opening.</p> <p>The display plates are mounted in a 1-gang electrical box.</p>
Terminations	Barrier terminal strips are provided for all system inputs and outputs. The terminals have integral square washers to eliminate the need for spade lugs. The terminals can accept up to 14 AWG wire.

Overhead Sensor Array

An optional Overhead Sensor Array can be added to the High Security Tailgate System to detect side-by-side passages.

Contact Kouba Systems for details.

