

Wrong Way Alerting Solution

The Wrong Way Alerting Solution is a robust system that provides reliable wrong way driver detection on ramps and gives transportation agencies deeper insights that can help in developing effective strategies and resolutions to this challenging problem.



The wrong way module detects wrong way vehicles and sends an automated message alert with an image snapshot to ISS Alert Trust[®], where event verification occurs reducing the time consuming task of having agency operators validate events. Once the event has been confirmed, an automated message alert with an image snapshot is sent via email, multi-media message (MMS), or the wrong way API to the Traffic Management Center central management software. The system also provides a 30-second four-quadrant video of the event, allowing traffic operators to visually observe if the vehicle has self corrected or continued onto the highway.

Drivers wrongfully entering the highway from an off-ramp pose a serious safety risk and can result in injury or fatalities. This solution provides insights to help improve the safety performance of roadways.



Multi-directional
camera



Provides a visual
verification snapshot



Highly accurate and
validated true events



Automated message
alerts via email and MMS



Wrong Way Alerting Solution

Wrong Way Processor

Power

- Operates on 5 VDC @ 1.5W max standard
- Power supply operates on 110 - 240 VAC

Processor

- ARM A9 with 1 GHz Quad Core
- Integrated real-time clock with battery backup

Storage

- 4GB flash storage
- All device data is retained in nonvolatile memory

Communications

- Ethernet 10/100/1000
- Wired per TIA-568

Mechanical

- Dimensions: 114 x 76 x 29 mm (4.5 x 3 x 1.125 in)
- Weight: 0.23 kg (0.5 lb)

Maintainability

- Ultra reliable: MTBF (mean time between failures) designed for 90,000 hours (10 years) estimated based on component quality and manufacturing techniques

Environmental Conditions

- Temperature range: -40° to +74°C (-40° to 165°F)

Warranty

- 2-year warranty

Regulatory

- FCC
- NEMA TS2-2003
- CE EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3
- ICES 003

Camera

Power

- Power over Ethernet (POE) IEEE 802.3at Type 2 Class 4
- IR illumination on: class 4, typical 11.1 W, max 17.0 W

Lens

- Varifocal, 3-6 mm, F1.8-2.6
- 4x1080p capture mode:
 - Horizontal field of view: 96° - 49°
 - Vertical field of view: 53° - 27°
 - Diagonal field of view: 113° - 55°

IR Illumination

- Four individually controllable IR with power-efficient, long-life 850 nm IR LEDs
- Range of reach 15m (50 ft)

Video Compression

- H.264 (MPEG-4 Part 10/AVC)

Communications

- Shielded RJ45 10BASE-T/100BASE-TX PoE
- One IP address for all video channels

Mechanical

- Dimensions:
 - Height: 91.5 mm (3.6 in)
 - Radius: 255 mm (10.04 in)
- Weight: 2.0 kg (4.4 lb)

Environmental Conditions

- Temperature range: -30° to +50°C (-22° to 122°F)
- Humidity 10-100% RH (condensing)

Warranty

- 5-year warranty

Regulatory

- EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-6-1, EN 61000-602, FCC Part 15 Subpart B Class A
- IP66/67, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9)

External Contact Closure

Power

- 12 to 36 VDC
- 188 mA @ 24 VDC

Inputs and Outputs

- 6 channels
- Isolation: 3k VDC or 2k Vrms

Environmental Conditions

- Temperature range: -40° to +75°C (-40° to 167°F)

Communications

- 2 switched 10/100 Mbps RJ45 ports
- Modbus/TCP (Slave), Ethernet/IP, SNMPv1/v2c, RESTful API, TCP/IP, UDP, DHCP, BOOTP, HTTP

Warranty

- 2-year warranty

ISS Alert Trust

- Network Requirements:
 - Public IP address
 - Access to webserver port

