SmartSensor Matrix™ Detector

Wavetronix

Wavetronix's SmartSensor Matrix detector detects immobile or moving vehicles at an intersection. It solves the problems associated with magnetic detection loops: positioning errors, costly and frequent maintenance, damage to the roadway and lane closures during installation and maintenance operations.

Description

The SmartSensor Matrix generates 16 separate radar beams in close proximity to create its 43-meter, 90-degree two-dimensional field of view. It detects each vehicle in its field of view, remembers its position and can predict future movements. In this way, it creates a two-dimensional view that can replace a video capture.

The Matrix provides constant performance levels regardless of weather conditions: rain, freezing rain, snow, wind, dust, fog or ambient light variations.

If the detector has been prewired, it can be installed and configured in less than an hour. Its configuration software is very easy to use and features auto-configuration capabilities that make it possible to configure the device in as little as 15 minutes. Its installation is highly flexible and very adaptable to needs and the intersection.

The SmartSensor Matrix can operate in uninterrupted mode for 10 years without recalibration, battery replacement or cleaning.

Specifications

Compliance

- Weatherproofness (UL746C)
- NEMA 250 standard for:
    - Watertightness
    - Exterior icing
    - Water infiltration
    - 4X corrosion protection
    - Gasket
- Tests required under the IEC 61000-4-5 electromagnetic compatibility standard for Class 4

installation conditions
- Tests required under the NEMA TS 2-2003 standard:
    - Vibration
    - Impact
    - Transitional
    - Operating temperature
    - Supply voltage

Performance

- Real-time presence data in 10 lanes
- Detection area: 1.8 to 43 m (6 to 140 ft.)
- Field of view: 90°
- Resolution: 0.6 m

Technical characteristics

- Operating frequency: 24-24.25 GHz
- Bandwidth: 245 MHz
- Dimensions: 33.5 x 26.9 x 8.4 cm (13.2 x 10.6 x 3.3 in.)
- Weight: 1.9 kg (4.2 lbs.)
- Lexan polycarbonate enclosure
- Power supply: 9-28 VDC
- Power consumption: 9 W
- Operating temperature range: -40 to +74°C (-40 to +165°F)

For more information: 1 800 363-5913

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