



# **EVO** RADAR™

Superior radar traffic detection,  
accuracy, and reliability

**ECONOLITE**  
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# EVO RADAR™

## Superior traffic detection, accuracy, and reliability

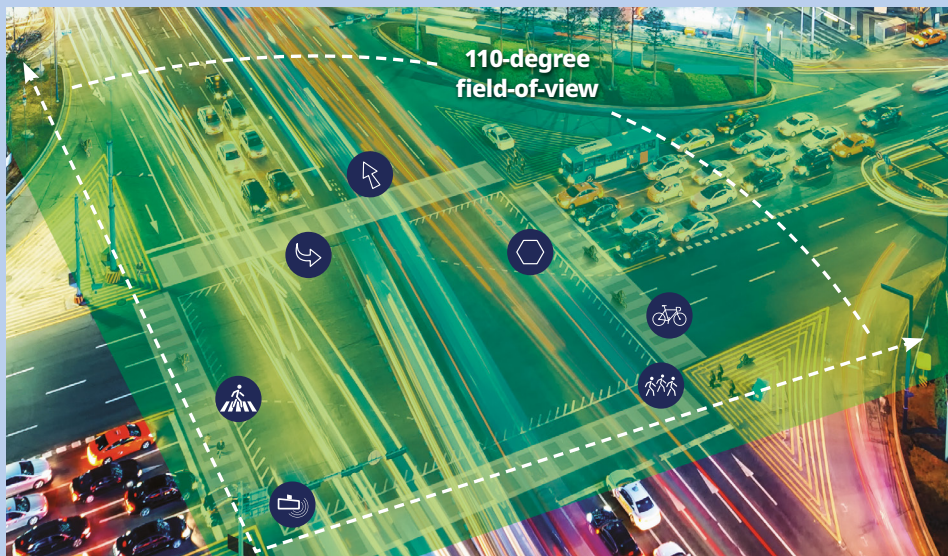


Econolite's EVO RADAR sensor is the One-Stop-Shop detection solution and the latest, most capable radar on the market. EVO RADAR uses forward-fire Frequency Modulated Continuous Wave (FMCW) radar design and technology to achieve superior traffic detection accuracy and reliability across a variety of detection objectives, including stop bar, advance, departure, dilemma zone, red light, bicycle, and pedestrian detection.

EVO RADAR sensors are ideally suited for a variety of intersections, using a 110-degree field of view covering two approaches and up to 900 feet (275 m) of detection approach area with a single sensor. EVO RADAR sensors are designed to support diverse intersection geometries with reliable detection using fewer sensors to reduce travel times and traffic congestion, while increasing safety at intersections



## Situational awareness: Seven modes of detection



1. Stop-bar through and left turn
2. Bicycle detection
3. Pedestrian detection
4. Pedestrian cross-walk
5. Advance detection
6. Left-turn advance
7. Departure

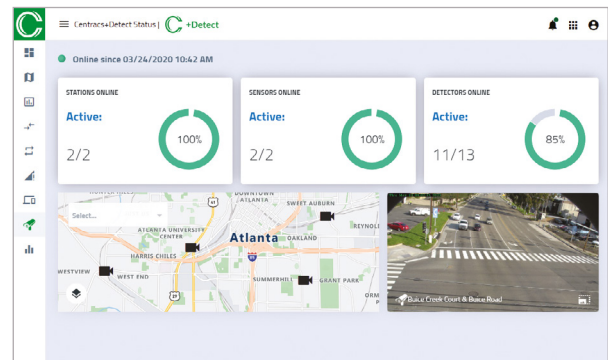
Primary and side street approaches detect equally at 99.91% accuracy. Based on evaluation over n= 44,940 vehicles.

## EVO RADAR key specifications

Specifications	EVO RADAR Sensor
Compliance	FCC part 15, IP67, ETSI EN 300-440, RSS- 310, RSS-210
Dimensions	12.1 in L x 5.4 in H x 2.81 in W (308 mm L x 136 mm H x 71 mm W)
Frequency Band	24.5 to 24.25 GHz (K band)
Horizontal Field of View Angle	110°
IEC/EN	61000 (2, 4, 5)
Installation	14-2 grounded cable
Interface	100BaseT Ethernet
Max Angle to Traffic Flow	60°
Mounting Height Requirement	17 ft to 24 ft (5.18 m to 7.3 m)
Operating Temperature	-40° to +165°F (-40° to +74°C)
Output Power	20 dBm PK / <108dBµV/m AVG*
Power Supply	20 to 28 VDC 36 W @ 20°C
Range	700 ft (215 m) for light vehicles and 900 ft (275 m) for larger vehicle
Warranty	Three years
Weight (approximate)	5.5 lbs. (2.49 kg)

## Detection system data analytics and reporting with Centrac's® +Detect

Centrac's +Detect is a cloud-based data reporting, analytics, and monitoring solution for Econolite's EVO RADAR detection systems. +Detect also serves as an extension to the Centrac's Mobility Platform, Econolite's industry leading cloud-based ATMS. +Detect automatically and virtually reports traffic conditions and critical datasets, such as road user classifications, volumes, turning movements, speeds, and signal performance metrics.



With +Detect, automatically access and leverage your detector system's deep data sets for all-new levels of performance measures, without any additional installation requirements. Some key benefits of these datasets:

- Mobility Planning
- Capacity Planning
- Signal Timing
- Intersection Design
- Corridor Management
- Safety Analysis
- Environmental Impact Assessment
- System Health Monitoring

# Interested in learning more about EVO RADAR?



Our experts will be happy to speak with you and answer all of your questions.



## Benefits of EVO RADAR:

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- Only two sensors required for a typical intersection
- Simple to set up and use
- Stop bar, advance, and departure detection up to 900 feet (275 m)
- Power Line Communications (PLC) up to 1,000 feet (300 m)
- 128 tracked and classified objects generated from 512 unique detections
- Lane-by-lane detection through entire 110-degree field of view
- Pedestrian and bicycle detection
- Speed and object classification, vehicle counts, and ETA data
- Consistent all-weather performance
- Cloud-based data analytics with Centracs® +Detect