EVO RADAR™

Sensor, J-Box, and HUB
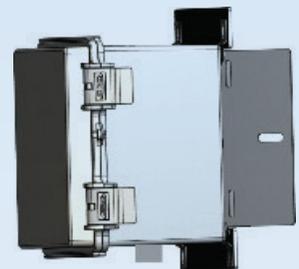

EVO RADAR Sensor

Overview

The Econolite EVO RADAR™ system is the next generation, high-performance, vehicle, pedestrian, and object detection system. The system uses wide angle, long range, radar sensors, which allow full intersection coverage from stop bar to advanced detection, using just two sensors for most intersection configurations.

EVO RADAR system consists of three major sub-systems: EVO RADAR Sensors, J-Boxes, and HUB, and also includes a Traffic Manager program.

The EVO RADAR HUB has significant processing power with its quad-core, i7 processor, and provides easy system integration with built-in interfaces for NEMA TS2 SDLC, ATC / ITS SDLC, TS1 & 33x PIO, Ethernet, and built-in power supplies.

EVO RADAR J-Box

EVO RADAR HUB

ECONOLITE

The system uses Power Line Communications (PLC) to enable 10/100 Ethernet communications to EVO RADAR™ Sensors, up to 1000 feet from the HUB, using a shielded, AWG 14/2 cable. The maximum data rate is 88 Mbps.

EVO RADAR Sensors send vehicle and pedestrian detection information to the EVO RADAR HUB via the PLC. The HUB converts this information into NEMA TS2 and ATC controller SDLC messages, and PIO outputs for legacy systems. The HUB also provides high-resolution logging of detection information, and an interface for EVO RADAR configuration software.

EVO RADAR HUB Includes:

Functions and Features
▪ Eight PLC channel connectors (2 connectors per PLC channel)
▪ One Intel, quad-core, 1 GHz, i7 processor module, and a separate 300MHz I/O processor
▪ One 25-pin, ATC compatible, C12S connector to provide NEMA Port 1 and ATC SDLC interfaces
▪ One 44-Pin, PIO connector providing 24 detector output and 16 "color" inputs
▪ Two 10/100 Ethernet ports
▪ Two USB ports
▪ One SD Card slot
▪ Device status LEDs
▪ Three configuration push buttons
▪ One EIA-232 terminal port
▪ Built-in 48VDC @ 600 W, and 12VDC @ 150 W power supplies

General Data

Specification	EVO RADAR HUB
Dimensions (H x W x D)	11.24 x 4.01 W x 10.57 in (286 x 102 x 269 mm)
Weight	6.42 lbs (2.91 kg)
Operating Temperature	-34.6°F to +165.2°F (-37°C to +74°C)
Operating Voltage	85 VAC to 265 VAC
NEMA TS2 Compliance	Compliant for temperature range, voltage, transients, vibration and shock.
FCC Part 15 Compliance	FCC Part 15 Subpart B, Class A

Mounting Information
Wall mount, shelf mount, and rack mount options are available to support different cabinet types.

Learn more about additional Sensor products