

Leddar™ d-tec 2.1 Traffic Sensor



THE SMART TRAFFIC DETECTION SOLUTION
FOR SUSTAINABLE MOBILITY

 **Leddar™** | Accurate 3D
d-tec | Traffic Detection

Introducing the industry's first non-intrusive 3D vehicle detection system for traffic management systems

The industry spoke and LeddarTech listened: The Leddar™ d-tec solution provides unique advantages and benefits for optimizing traffic flow.

Based on the principle of the time-of-flight of light, the Leddar™ d-tec sensor emits non-visible light from LEDs (light emitting diodes) into the area of interest and measures the time taken for the light to reflect off of objects and return to the sensor. This provides very accurate 3D information that enables the sensor to **precisely detect** vehicles of all dimensions, including motorcycles and bicycles.

In addition, since the acquisition of information is compiled thousands of times per second, the Leddar™ d-tec system provides very robust detection in **adverse weather and lighting conditions**.

Using industry-standard Power over Ethernet (PoE) technology, the same cable provides both power and data communication to the Leddar™ d-tec traffic sensor, eliminating expensive coaxial and power cable installation.

Installation and Configuration

Because the 3D optical sensor is not influenced by the horizon as is the case in video detection, the Leddar™ d-tec can be installed to current traffic infrastructure without additional mounting poles thus greatly facilitating the installation. Furthermore, an integrated onboard image processor and motorized actuator provides remote accurate alignment of the sensor to provide unmatched flexibility and ease of configuration.



Features

- Non-intrusive multi-lane vehicle, motorcycle and bicycle detection sensor
- Sensitivity to direction of traffic flow
- Rapid alignment and configuration using the Leddar™ d-tec Configuration software
- Monitor-only software module
- Arrow icon display option for virtual loops
- Flexible installation to existing infrastructure without additional mounting poles
- IP addressability

Technical specifications

Leddar™ d-tec Traffic Sensor	
Product models	Leddar™ d-tec Narrow angle (PN 75A0002) Leddar™ d-tec Wide angle (PN 75A0003)
Detection Engine	LED (light emitting diode)
Power	48 VDC - IEEE 802.3at PoE (Power over Ethernet)
Dimensions	8.9 x 10.2 x 15.2 in (226 x 259 x 386 mm)
Weight	6.6 lb (3 kg)
Enclosure	Rugged design for full protection against dust and elements
Temperature	- 29° F to + 140° F (- 34° C to + 60° C)
Ingress protection	IP67
Mounting	Compatible with standard traffic hardware
Regulatory	FCC Part 15, Subpart B, Class A ICES-003, Class A
Connection	Ethernet Cat 5e RJ45 Plug Kit: <ul style="list-style-type: none"> Shielded Cat 5e RJ45 plug Bayonet-locking coupling/protective connector
Performance	Multilane stop bar detection: 16 outputs per traffic sensor Detection range: up to 165 ft (50 m) Accurate detection in all weather conditions, any time of day



Leddar™ d-tec Controller Interface Cards	
Product models	4-Channel Full-Width (PN 75A0004) 4-Channel Half-Width (PN 75A0006) 2-Channel (PN 75A0005)
Accessory power supply	Input: 88-264 VAC, 47-63 Hz, 0.8 A Output: 42-54 VDC, 0.8 A
Detector rack / Input file Compatibility	170 / 2070 NEMA TS1/TS2 Direct integration with selected controller manufacturers
Temperature	- 29° F to + 165° F (- 34° C to + 74° C)
Configuration	Compatible with Windows XP, Windows Vista, Windows 7 Alignment and configuration are performed using laptop connected to controller interface card

