

2ND  
GENERATION

# d-tec

Traffic Sensor  
A **Leddar™** solution



## LED-BASED DETECTION SOLUTION

### Leddar™ d-tec, for optimized results

The Leddar™ d-tec is a traffic sensor offering accurate stop bar and advanced detection. Thanks to patented Leddar™ detection technology, it compiles data thousands of times per second, procuring accurate and consistently reliable detection in any environmental conditions. Providing lateral positioning in the field of view, it ensures that vehicles of all sizes, including bicycles and motorcycles, are accurately detected.

### 250 feet out

With the 2nd generation, the d-tec traffic sensor is engineered to answer all traffic management needs. The d-tec Long Range offers detection up to 250 feet thus allowing traffic managers to provide advanced detection for dilemma zone requirements. Leddar™ d-tec meets your short, mid and long-range needs with reliable and robust performance!

### Low installation cost and time savings

Since the d-tec traffic sensor is designed to be seamlessly integrated with current traffic infrastructure, it only takes 2-4 hours to install a complete intersection and as little as 15 minutes to configure. It results in lower installation cost, time savings and peace of mind obtained from its optimal performance that exceeds traffic management's requirements.

### Leddar™, a unique patented technology

Leddar™ (Light Emitting Diode Detection and Ranging) is a novel detection and ranging technology created by LeddarTech that performs time-of-flight measurement using pulses from visible or infrared LEDs. Combining multiple independent active elements, typically 16, into a single sensor, Leddar™ continuously provides rapid and accurate detection and ranging in the entire field of view without any moving parts. The large field of view and diffused light pulses of the Leddar™ sensor, processed through innovative algorithms, allow detection of a wide range of objects under various environmental conditions.

### Main Features

- LED-based sensing technology
- Integrated video sensor
- Fully IP addressable
- Detection of all types of vehicles, including bicycles
- Single Cat 5e Ethernet cable - Power over Ethernet (PoE)
- Counting, speed measurement and recording

### Benefits for Traffic Managers

- Reliable in any environmental conditions
- Fastest installation directly to current infrastructure
- Quick and easy configuration
- Provides MPEG-4 video back to your TOC
- IP addressable with remote access configuration and monitoring
- Scalable solution for all your ITS needs

EXPERIENCE THE DIFFERENCE LEDDAR™ TECHNOLOGY MAKES

# d-tec

Traffic Sensor  
A **Leddar™** application

LED-BASED STOP BAR DETECTION  
OF ALL VEHICLE TYPES IN ANY  
ENVIRONMENTAL CONDITIONS



## Leddar™ d-tec Sensor

<b>Product models</b>	Leddar™ d-tec   Long range (PN 75A0018)
	Leddar™ d-tec   Narrow angle (PN 75A0002)
	Leddar™ d-tec   Medium angle (PN 75A0014)
	Leddar™ d-tec   Wide angle (PN 75A0003)

<b>Detection Technology</b>	LEDDAR™ (Light Emitting Diode Detection and Ranging)
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<b>Power Supply</b>	IEEE 802.3at, 48 to 56 VDC, 30W minimum
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<b>Power Consumption</b>	15W without heater 30W with heater
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<b>Dimensions</b>	8.9 x 10.2 x 15.2 in (226 x 259 x 386 mm)
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<b>Weight</b>	6.6 lb (3 kg)
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<b>Enclosure</b>	Rugged design for full protection against dust and elements
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<b>Temperature</b>	- 29° F to + 140° F (- 34° C to + 60° C)
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<b>Ingress protection</b>	IP67
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<b>Mounting</b>	Compatible with standard traffic hardware Recommended mounting height: 17 to 21 feet
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<b>Regulatory</b>	FCC Part 15, Subpart B, Class A ICES-003, Class A
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<b>Connection</b>	Ethernet Cat 5e RJ45 Plug Kit: <ul style="list-style-type: none"><li>• Shielded Cat 5e RJ45 plug</li><li>• Bayonet-locking coupling/protective connector</li><li>• Maximum cable length of 335 ft (100m)</li><li>• Longer connection available using PoE repeater</li></ul>
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<b>Performance</b>	Multilane stop bar detection: 16 outputs per d-tec. Accurate detection in all weather conditions, any time of day. Recommended maximum stop bar distance: Long range: 250 ft (75m) Narrow angle: 180 ft (55m) Medium angle: 130 ft (40m) Wide angle: 100 ft (30m)
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## Leddar™ d-tec Controller Interface Cards

<b>Product Models</b>	4-Channel Full-Width (PN 75A0004)
	4-Channel Half-Width (PN 75A0006)
	2-Channel (PN 75A0005)

<b>Accessory Power Supply</b>	Input: 88-264 VAC, 47-63 Hz
	Output: 42-56 VDC
	0.8A, 1 sensor (PN 75A0007)
	3.3A, 4 sensor (PN 75A0010)



4-Channel Half-Width



2-Channel



4-Channel Full-Width

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