



# Leddar™ d-tec

LED-based Vehicle Detection – New Technologies  
Solving Today's Issues



# ISSUES IMPACTING VEHICLE DETECTION

## Harsh road conditions



# ISSUES IMPACTING VEHICLE DETECTION

Intrusive and disruptive





# ISSUES IMPACTING VEHICLE DETECTION

Shadows, glare and fog



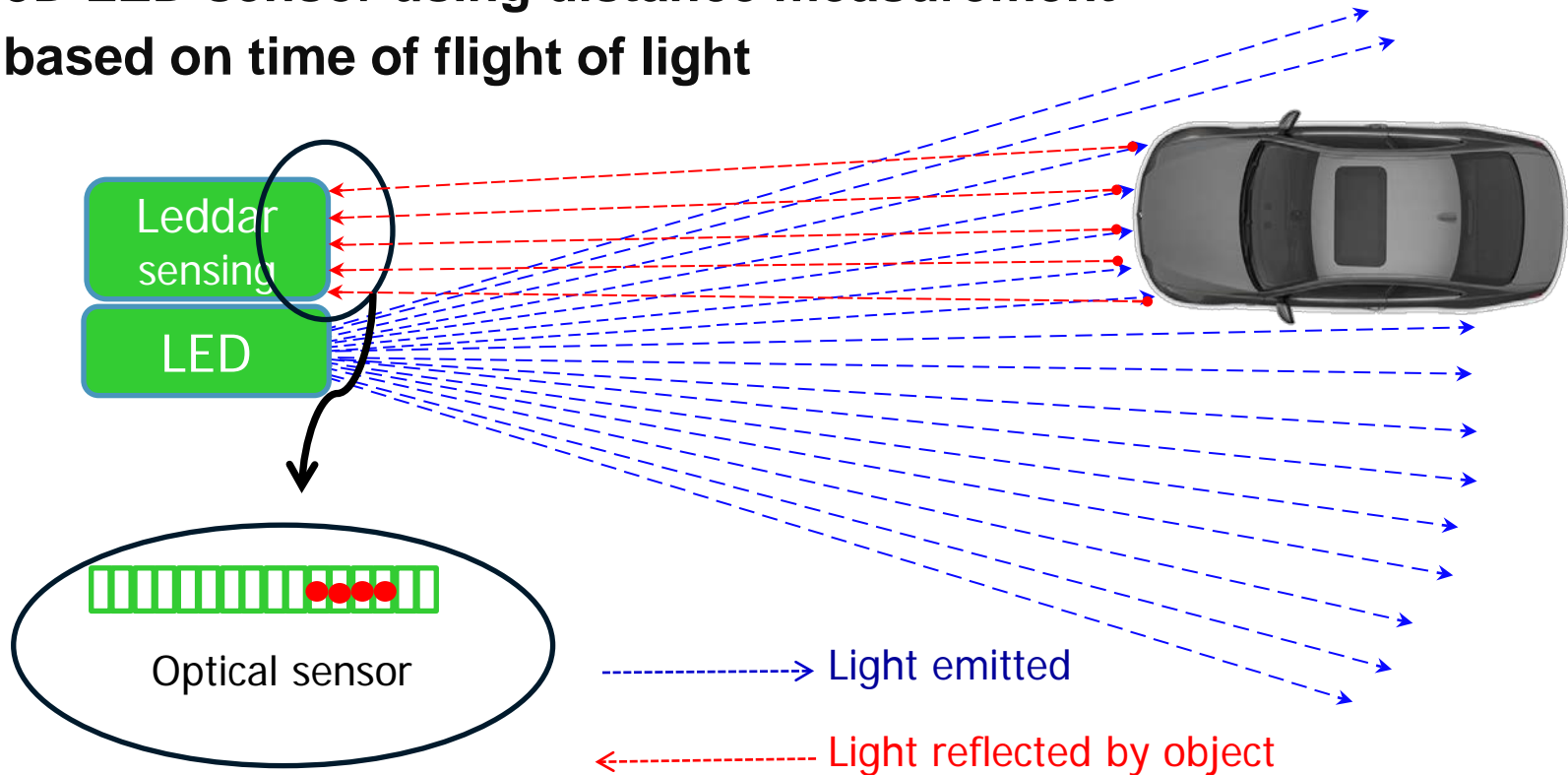
# ABOUT LEDDARTECH

- Spawned in 2007 as a spinoff of INO (national optic institute), home to the largest concentration of skills in the field of optic and photonic solutions for SMEs and large corporations in Canada and around the world
- Mission: To provide the most accurate sensing solution based on LED technology
- Owner of the unique and patented Leddar™ technology
- Leddar™ d-tec is successfully optimizing traffic management across North America
- Leddar™ products for other ITS applications, notably traffic law enforcement, deployed worldwide

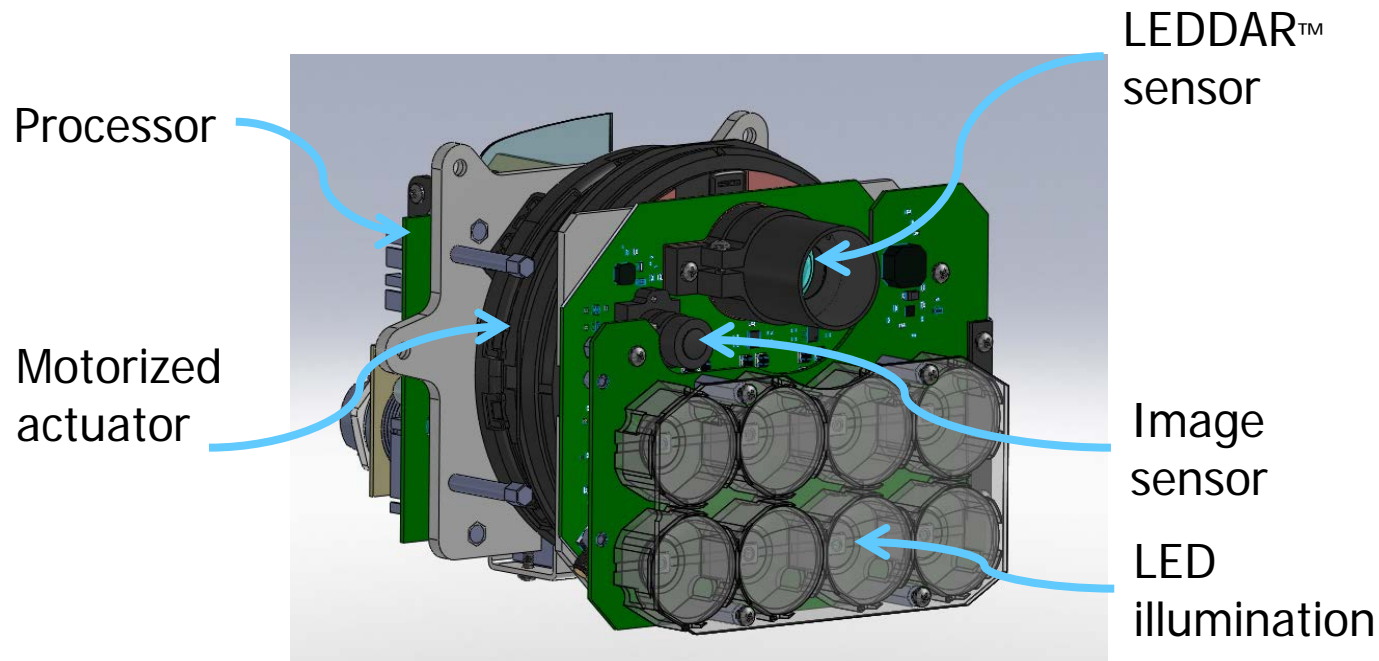


# How LEDDAR™ TECHNOLOGY WORKS

3D LED sensor using distance measurement based on time of flight of light

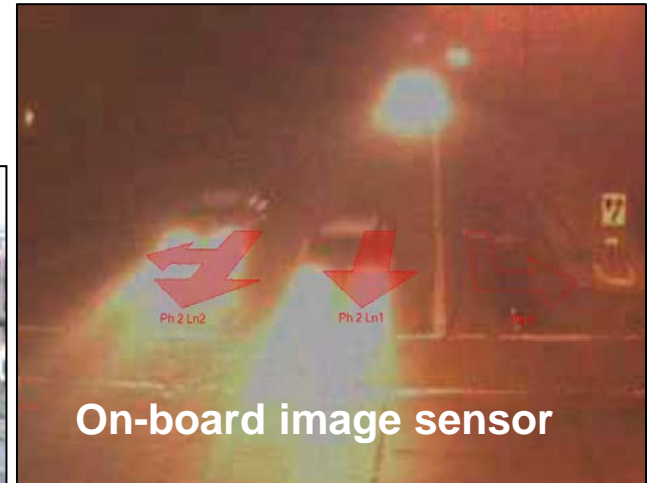
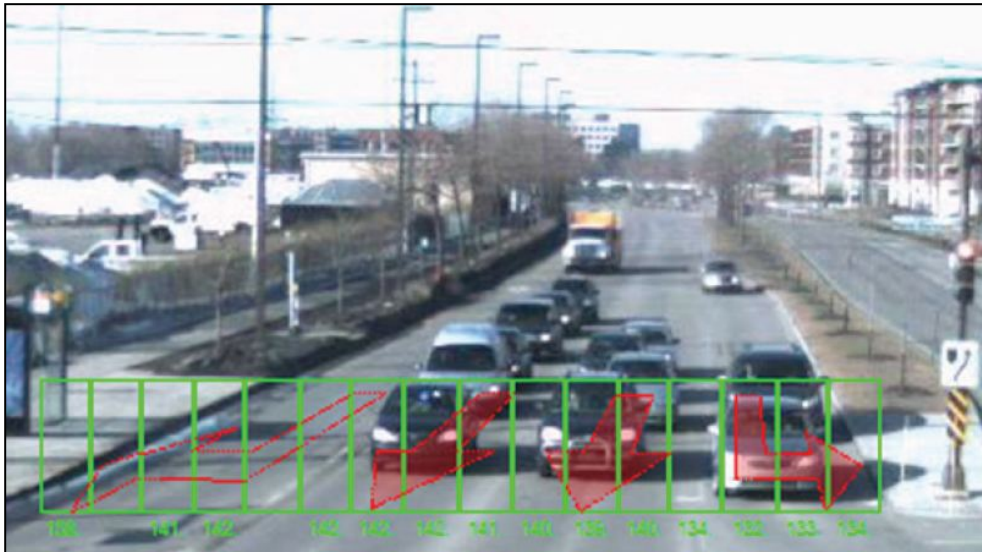


# INSIDE A LEDDAR™ D-TEC

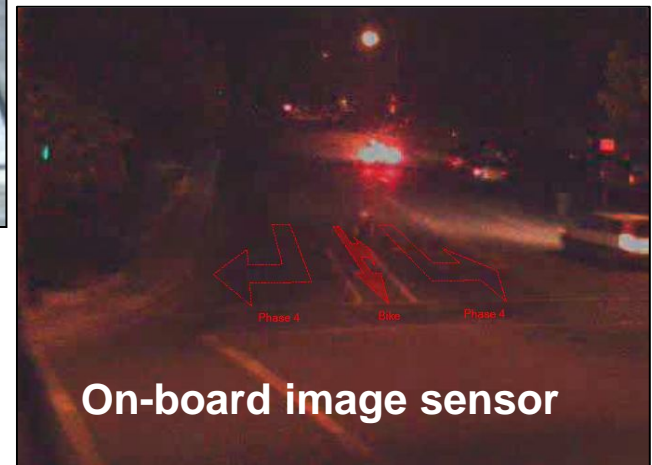


# LEDDAR™ D-TEC AT WORK

Reliable in all environmental conditions



On-board image sensor



On-board image sensor





# LEDDAR™ D-TEC AT WORK - VIDEO

Detecting all types of vehicles:  
Cars, motorcycles, bicycles



# LEDDAR™ D-TEC: THE NON-INTRUSIVE SOLUTION FOR ALL TRAFFIC DETECTION NEEDS

## Peace of mind

Invest your time elsewhere than answering complaints

- Accurate stop-bar detection (98.7%) detection
  - cars, trucks, buses
  - motorcycles
  - bicycles
- Reliable in all weather conditions:  
Day, night, glare, rain, fog, snow...
- Fast and easy installation and configuration
- Minimized costs and disruption



# WHY LEDDAR™ D-TEC

## Main features

- 98.7% accurate detection
- LED-based 3D sensing engine
- 3D vehicle tracking
- Image sensor included
- Fully IP addressable
- Optics mounted on motor-driven actuator
- Single CAT5 / Ethernet cable (POE)
- Counting and recording capability



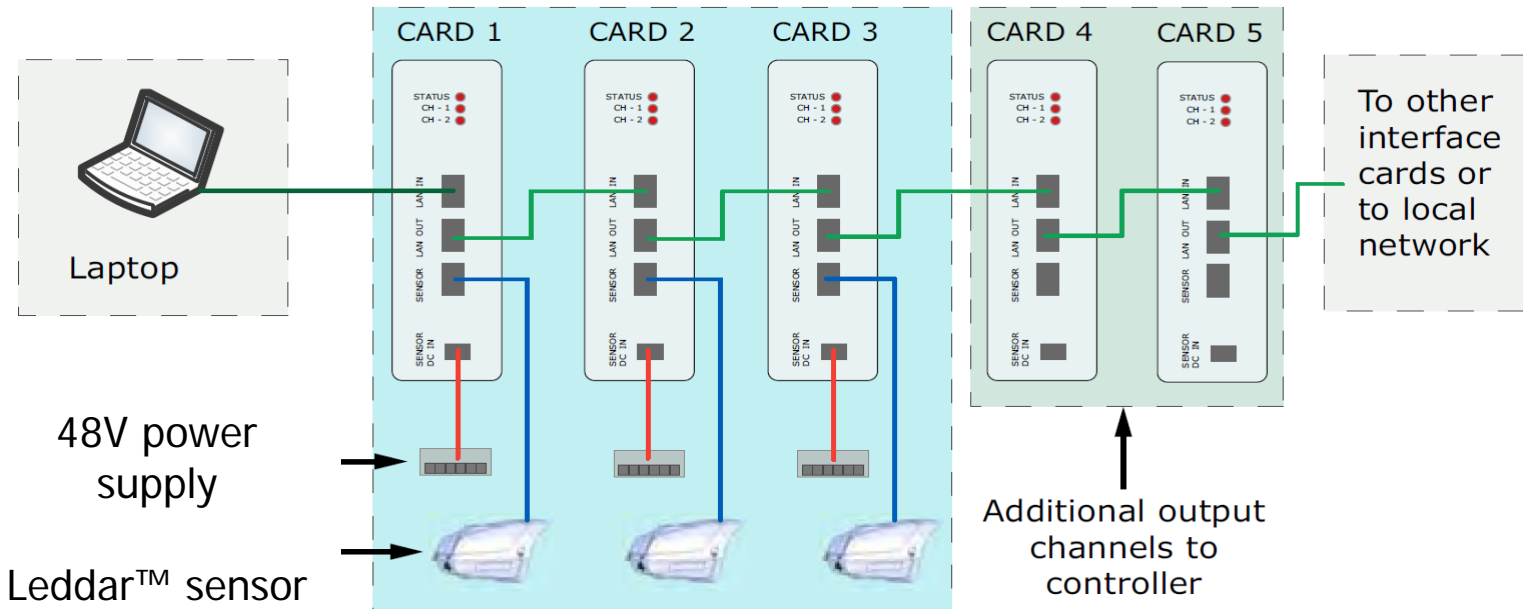
## Benefits for traffic managers

- Reliable in all weather, lighting and environmental conditions (not dependent of metal content) – stops complaints
- Provides MPEG-4 video back to your TOC
- Remote access and monitoring
- Fast installation with easy configuration directly to current infrastructure
- Scalable solution for all of your ITS needs



# LEDDAR™ D-TEC SYSTEM COMPONENTS

## Compact and convenient cabinet interface cards





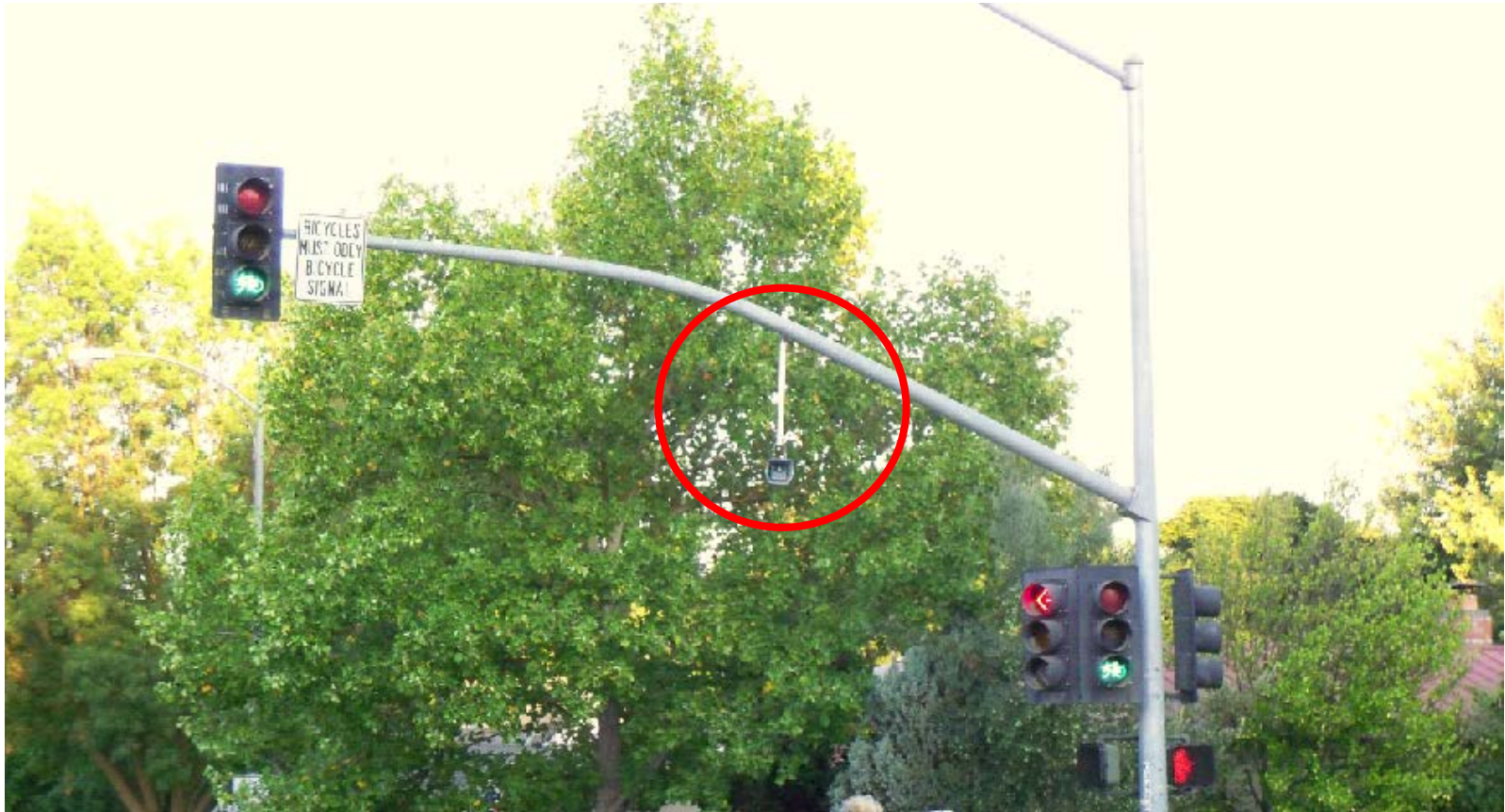
## Quick installation to current infrastructure and easy configuration













# SUMMARY OF LEDDAR™ D-TEC ADVANTAGES

- Accurate detection performance (industry reference > 98%)
- Same performance day and night (independent of ambient light conditions)
- Detects bicycles and motorcycles
- Image sensor on board (MPEG-4 stream to TOC)
- Very simple installation and rapid configuration (local or remote)
- Accurate in all weather and conditions (rain, fog, snow, metallic and electromagnetic interference, etc. )
- Smart investment: scalable ITS solution for future enhancement features
- Single Cat 5 cable: Eliminates costly cable installation with a single cable for power and data communication, using industry-standard Power over Ethernet (PoE) technology



# CONTACT INFO

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