

LEDDAR™ ADVANCED TRANSPORTATION MANAGEMENT SYSTEM

According to the Texas Transportation Institute, in 2007, Americans experienced 4.2 billion vehicle-hours of delay resulting in the waste of 2.9 billion gallons of fuel due to traffic congestion. The overall congestion cost amounted to \$78 billion.

Similar to the Lidar principle, the innovative LEDDAR™ technology is an acronym for *Light Emitting Diode Detection And Ranging* and is a 3D time-of-flight sensor.

Having been field tested in different proof-of-concept experimentations, the LEDDAR™ technology has proven its worth in providing extremely robust and reliable vehicle detection for traffic intersection and roadway applications.

CUSTOMER BENEFITS

- Very accurate and reliable detection & ranging technology
- Excellent lateral and longitudinal resolution
- Continuous detection regardless of movement of vehicle
- Same LEDDAR™ sensing unit can detect multiple lanes per approach
- LEDDAR™ sensing unit provides added-value critical information, notably:
 - Continuous zone monitoring
 - Real-time traffic flow density
 - Vehicle count
 - Vehicle speed
- Very low power consumption
- Detection in adverse environmental conditions (snow, fog and rain)
- Very competitive price positioning
- Beneficial integration synergies due to sharing of common components (driver, LED, case and optics)
- Green and 'safe' technology which is not limited by radio emission restrictions
- Use of LEDs (either visible or IR) for detection & ranging for short to medium ranges



Please contact Dave Gilbert, VP Business Development, Sales & Marketing at the following address to know how LeddarTech can solve your detection and ranging requirements:

E-mail: dave.gilbert@leddartech.com

T : 1 418 653-9000

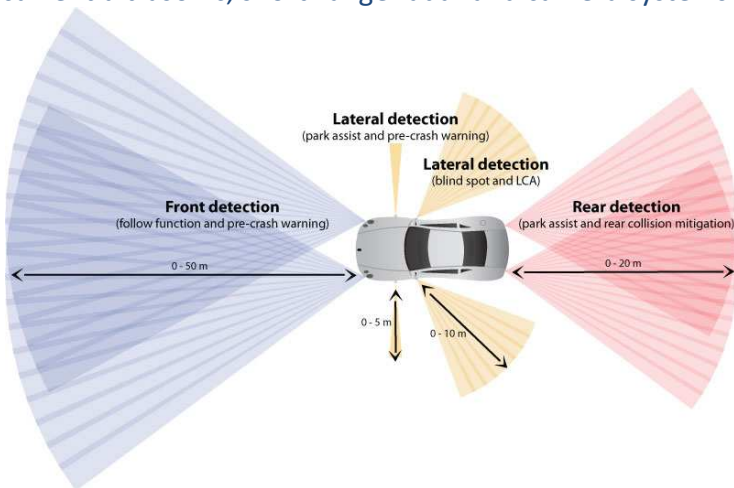
LEDDAR™ AUTOMOTIVE OBSTACLE DETECTION TECHNOLOGY

Introducing a technological paradigm shift for automotive obstacle detection, the LEDDAR™ technology combines the advantages of LED lighting modules with sophisticated detection and ranging capabilities.

Similar to the Lidar principle, the innovative LEDDAR™ technology is an acronym for *Light Emitting Diode Detection And Ranging* and is a 3D time-of-flight sensor.

In contrast to prevailing detection technologies the LEDDAR™ technology has a dominant advantage of leveraging the LED lighting module in order to provide a 360° peripheral detection and ranging capability.

The LEDDAR™ technology is operational in all weather conditions, has no blind-zone or emission restrictions and is eye-safe. Current range applications are from 0 to 50 meters which enables the LEDDAR™ solution to outclass current ultrasonic, short-range radar and camera systems.



Please contact Dave Gilbert, VP Business Development, Sales & Marketing at the following address to know how LeddarTech can solve your detection and ranging requirements:

E-mail: dave.gilbert@leddartech.com

T : 1 418 653-9000

CURRENT LEDDAR™ PLATFORM

System Performance

- Range of detection: 0 to 50 meters;
- Accuracy: <0.2% of range;
- Data refresh rate: From 1 to 150 Hz;
- Wavelength: 950 nm;
- Supply: 12 VDC (development kit includes a 120/240 VAC power supply);
- Acquisition: 16 channels simultaneous.
- Software development kit including:
 - API;
 - Acquisition configuration interface;
 - Real-time PC-based display of detected object(s) per field-of-view;
 - Data-logging capability for post-processing and data export.