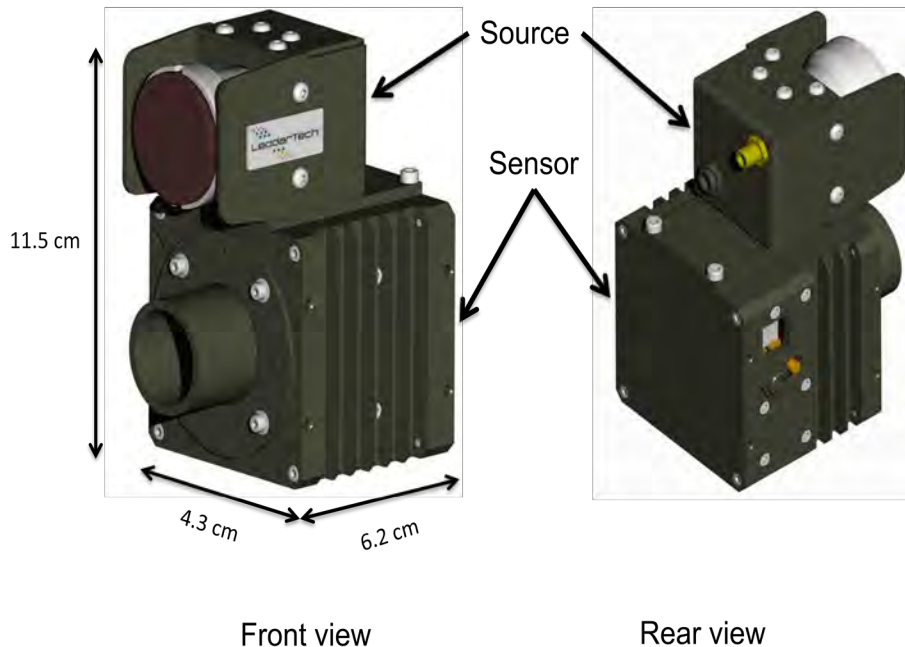


The Leddar™ development kit is a time-of-flight sensor module based on LED illumination with multiple field-of-view capability assembled in a compact enclosure.

1 Components & Mechanical Design

The Leddar™ development kit includes:

- Sensor unit with optical filter;
- IR illumination source with corresponding optics;
- Power supply;
- Software development kit with visualisation and data logging tools.



2 Leddar™ Sensor

The Leddar™ sensor has 16 fields-of-view with simultaneous acquisition capability. The typical total horizontal field-of-view opening is 32° with a vertical field-of-view opening of 4°. Different horizontal optical configurations are also available from 18° to 85°





3 IR Illumination Source

An IR LED emitter with dominant wavelength of 950 nm. The optical opening angle of the emitter is slightly wider than the receiver unit. This facilitates the assembly of the illumination unit with the sensor unit. No complex alignment procedure is required.

Optional LED emitters with different wavelengths are available upon request (visible or IR).

4 System Performance

- Range of detection: 0 to 50 meters;
- Accuracy: <1% of range;
- Data refresh rate: From 1 to 150 Hz;
- Operating temperature range¹: -20°C to 70°C;
- Supply: 12 VDC (development kit includes a 120/240 VAC power supply);
- Acquisition: 16 channels simultaneously.

5 Software Development Kit (.NET SDK)

- Application processing interface;
- Acquisition configuration interface with variable parameter adjustments;
- Application example in C# .NET;
- Real-time display of detected object(s) per field-of-view;
- Data logging capability for post-processing;
- Object data export to text file;
- Direct interface with MATLAB.

Application engineers will be able to easily include their own processing and interpretation algorithms in .NET languages.

6 System Requirements

- Microsoft Visual Studio .NET 2005, Microsoft Vista, Microsoft XP or Microsoft Windows 7;
- USB 2.0 port.

7 Associated Services

Your purchase of a LEDDAR development kit may include access to our company's experienced engineers who are able to provide technical consultation, research and development and product development services in order to ensure that your use of the LEDDAR technology can best meet your organization's detection needs and requirements.

LeddarTech also offers technical and R&D services in the field of detection using LED lighting.

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