



.....

# LIDAR-LITE V4 LED

LED-BASED, WIRELESS OPTICAL  
DISTANCE MEASUREMENT SENSOR

**NEW PRODUCT ANNOUNCEMENT**

OVERVIEW | FEATURES | CONFIGURATIONS | SPECIFICATIONS

.....

## MARKETING MEMO

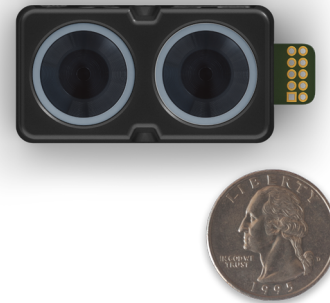
Aug. 23, 2019

# LIDAR-LITE V4 LED

**NEW PRODUCT  
ANNOUNCEMENT**

## PRODUCT OVERVIEW:

Our LIDAR-Lite v4 LED sensor is the first to incorporate ANT® wireless networking technology into an optical sensor. Its built-in nRF52840 processor means that developers can create custom applications, or LIDAR-Lite v4 can be operated as a stand-alone device right out of the box by using the preloaded stock application. And, like the LIDAR-Lite v3 and LIDAR-Lite v3HP sensors, it can also be directly connected to an external micro-controller running a custom user application. As such, it provides a highly adaptable option for OEM and maker applications in robotics, “internet of things” and unmanned vehicles — or any application where an ultrasonic sensor might otherwise be used. It’s perfect as the basic building block for applications where wireless capabilities, small size, light weight, low power consumption and high performance are important factors in a short-range, 10-meter, optical distance measuring sensor. LIDAR-Lite v4 requires an external 5 VDC power source.



## KEY FEATURES:

	<b>COMPACT, LOW POWER</b>	Small, lightweight, very low-power optical ranging sensor in a compact form factor
<b>NEW</b>	<b>ANT TECHNOLOGY</b>	Communicate wirelessly over our new ANT technology profile, our ANT connectivity-enabled devices and other ANT enabled products, or use the familiar I2C interface
<b>NEW</b>	<b>HIGHLY CUSTOMIZABLE</b>	Interface and programming options allow operation as a stand-alone device or connected to an external micro-controller
	<b>USER CONFIGURABLE</b>	Configurability allows users to optimize performance for accuracy, operating range and measurement speed
<b>NEW</b>	<b>OUT-OF-BOX FUNCTIONALITY</b>	Internal nRF52840 processor means it works straight out of the box with preloaded stock application, or you can create your own custom applications
<b>NEW</b>	<b>BLUETOOTH® TECHNOLOGY</b>	Quick, over-the-air updates via BLUETOOTH wireless technology

## PRODUCT CONFIGURATIONS:

SCHEDULE B: 9015100000  
HTS: 9015.10.4000

### LIDAR-Lite v4 LED



AVAILABLE	INCLUDES	COUNTRY OF ORIGIN	
September 2019	LIDAR-Lite v4 LED sensor, documentation	Made in Taiwan.	
DESCRIPTION	SKU	UPC	MSRP
LIDAR-Lite v4 LED	010-02022-00	753759213220	\$59.99 USD

## PHYSICAL SPECIFICATIONS:

<b>Unit dimensions</b> (WxHxD):	52.2 x 21.2 x 24.0 mm (2.1 x 0.8 x 0.9") <i>not including connector</i>
<b>Weight:</b>	14.6 g (0.5 oz)
<b>Resolution:</b>	1 cm
<b>Measurement repeatability:</b>	As measured indoors to a 90% reflective target; 1 cm is equivalent to 1 standard deviation. Using "high accuracy" mode, with averaging: +/- 1 cm to 2 meters +/- 2 cm to 4 meters +/- 5 cm to 10 meters
<b>Range:</b>	5 cm to 10 meters (as measured from back of unit)  I2C = >200 Hz typical
<b>Update rate:</b>	ANT = up to 200 Hz to a 90% target indoors at 2 m in normal operating mode

<b>Interface:</b>	I2C or ANT®, User configurable for SPI using the Nordic SDK
<b>Power</b> (operating voltage):	4.75 – 5.25 VDC
<b>Current consumption:</b>	2 mA idle, 85 mA during acquisition
<b>Operating temperature:</b>	-20 to 60° C
<b>LED wavelength:</b>	940 nm
<b>Beam divergence:</b>	4.77°
<b>Optical aperture:</b>	14.9 mm


This Time-of-flight ranging module uses an LED and optics for ranging. It does not use a laser; therefore, it is safe for eyes under normal usage. System contains no user-serviceable components. Repair or service of the system should only be conducted by factory-trained technicians.

## PACKAGING SPECIFICATIONS:

LIDAR-Lite v4 LED comes packaged in a bubble bag with label.

<b>Dimensions</b> (WxH):	160 x 85 mm (6.3 x 3.3")	<b>Total weight:</b>	23 g (0.8 oz)
--------------------------	--------------------------	----------------------	---------------

## COMPATIBLE ACCESSORY OVERVIEW:

	SKU	UPC	MSRP	DESCRIPTION	IMAGE
USB ANT Stick™ accessory	010-01058-00	753759106317	\$49.99	Transfer data seamlessly with this USB ANT Stick accessory. Simply plug the stick into your computer's USB port, and it will automatically receive your data when your compatible device is within range.	

The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.

Please note: The ECCNs and Classification numbers provided represent the opinion of Garmin International, Inc. of the proper classifications for the products today (based on the original software and/or original hardware). Classifications are subject to change. Under the U.S. export regulations, the U.S. Government assigns your organization or client, as exporter/importer of record, the responsibility for determining the correct classification of any item at the time of export/import. Depending on the products, the customer, or the country of destination, an export license may be required by the Department of Commerce prior to shipment. The Department of Commerce's Bureau of Industry and Security (former Bureau of Export Administration) website (<http://www.bis.doc.gov>) provides information that might be useful to you in determining whether you need to obtain a license for a particular shipment. To be clear, if an item described above does require a validated export license, it would be the exporter's responsibility to obtain this license prior to exportation.