OSA: Measurement of LiDAR Light Source for Autonomous Driving

Applicable model*: AQ6370/AQ6374/AQ6360

LiDAR (Light Detection and Ranging) is an optical sensing technology that irradiates an object with laser light and observes the reflected or scattered light to identify the distance to the object and the properties of the object. LiDAR is attracting attention as a technology that can be applied to automatic braking and autonomous driving technology, and demand for it is increasing mainly among automobile manufacturers, and development of performance improvement, downsizing, and cost reduction is underway.

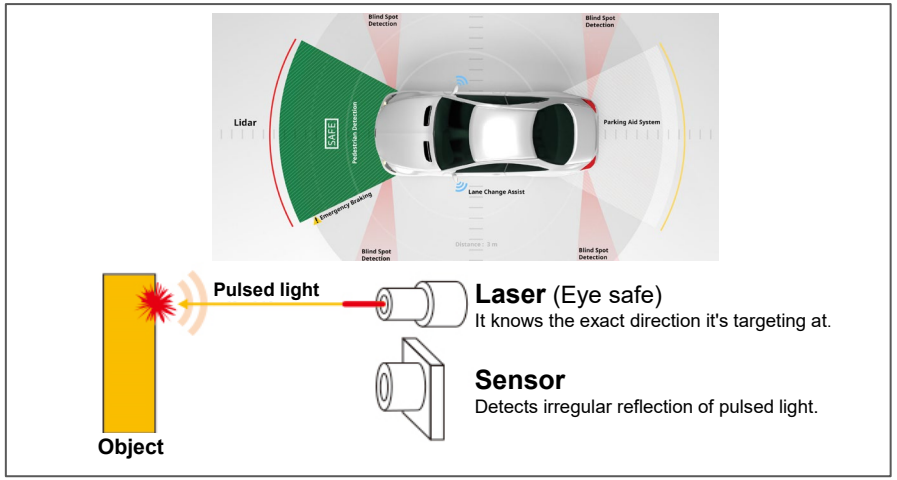
The global market of Laser/LiDAR for autonomous driving was 25M USD in 2017, but is projected to exceed 3B USD by 2025. (2018 Yano Research Institute)

LiDAR uses a pulsed infrared laser. The main laser wavelength is 800 to 900 nm, but LiDAR using the 1550 nm band laser, which is superior in terms of high output and low cost, is also under development. An optical spectrum analyzer is required to characterize these lasers.

The target model is compatible with the infrared wavelength band used for LiDAR, and it is useful for the development and evaluation of LiDAR because it can efficiently collect spatial output light with a large-diameter fiber. In addition, in combination with the AQ2200 series optical power meter, it can also be used for acceptance inspection and shipment inspection of laser parts.

* All versions unless otherwise specified.

LiDAR for autonomous driving



Optical spectrum measurement of laser for LiDAR