

Specification for 3D-LiDAR

Parameters	Requirements
LiDAR type	3D LiDAR
Channel	16 channels
Range	Minimum 100 meters
Range accuracy	Min ± 5 cm (or) better
Beam configuration	Uniform
FoV (Vertical)	Minimum 30° (+15° to -15°) (Higher FOV is preferred)
Angular resolution (Vertical)	Minimum 2° (or) better
FoV (Horizontal)	360°
Angular resolution (Horizontal)	Minimum 0.4° (or) better
Rotation rate	Up to 20 Hz (higher is preferred)
Weight	Must be less than 600 g
Data rate	Minimum 300,000 points/second (single return)
Power consumption	14W (Lidar consuming lesser power is preferable)
Operating voltage	9 – 24 V
Output Connection	Over Ethernet
Operating temperature	50° C (Lidar that operate at higher than this temp is preferred)
Operating System support	MS Windows, Ubuntu and ROS operating support is needed
MATLAB support	Lidar with MATLAB interface support is preferred
Note:	Any Educational discount is highly appreciated