



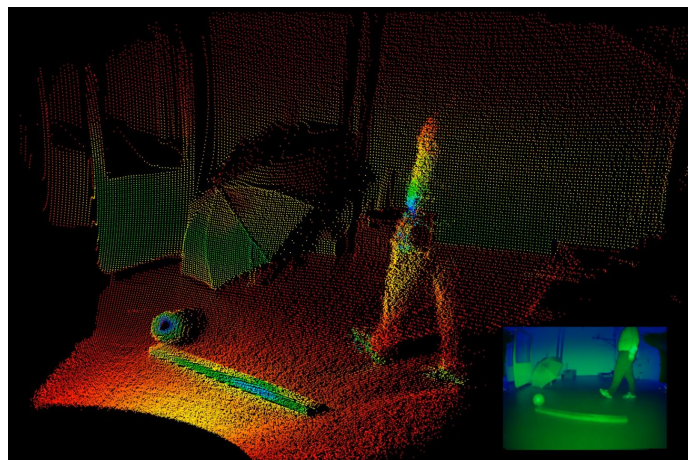
VALEO MOBILITY KIT

NEAR FIELD LiDAR



Valeo Near Field LIDAR System is a plug and play kit developed to allow users to easily interface with Valeo near field LIDAR A4 prototype sensor to obtain the depth-intensity-image and the point cloud of the sensor over an Ethernet interface.

- Plug & Play Kit
- All necessary components included
- High resolution Image
- Example Software and SDK included



SPECIFICATIONS FOR A4 NFL

| SENSOR CHARACTERISTICS | |
|--------------------------|--|
| Resolution (Pixel) | 320 x 240 |
| Frame Rate (typ.) | 15 fps |
| Frame Rate (max.) | 30 fps |
| Horizontal Field of View | 110° |
| Horizontal Resolution | 0.35° |
| Vertical Field of View | 78° |
| Vertical Resolution | 0.35° |
| Dynamic Range | 12 bit |
| Optical Format | 1/2" |
| Pixel Size | 20 µm |
| Laser Class | Class 1 |
| Wavelength | 940 nm |
| Maximum Range | Range 10% reflectivity 10m (target 15m), Retroreflectors up to 50m detectable |
| Minimum Range | ~10cm (depending on the reflectivity of the object) |

| POWER | |
|-------------------|--------------|
| Power supply | 10 - 24 V DC |
| Power consumption | 9 W |

| ENVIRONMENTAL CHARACTERISTICS | |
|-------------------------------|----------------|
| Operating Temperature Range | -40°C to +80°C |
| Sensor Protection Class | IP67 |

| PHYSICAL CHARACTERISTICS | |
|--------------------------|----------------------------------|
| Sensor dimensions | 91 x 41 x 47 mm (H x W x D) |
| Sensor weight | 220 g |
| ECU dimensions | 120 x 100 x 31 mm (H x W x D) |
| ECU weight | 385 g |

| INTERFACE | |
|-----------|------------|
| Ethernet | 1000Base-T |

| SYSTEM COMPONENTS | |
|---|--|
| Near Field LiDAR | |
| ECU (Standard Kit ECU for 1 Sensor, Prototype ECU for up to 4 Sensors available on request) | |
| Harness (ethernet and power) | |

| DATA | |
|--------|--|
| Output | Pointcloud (xyzi) and Distance-Intensity (di) |

The kit includes 1 Near Field LiDAR and harness

