



GEN 2

# SCALA® 3D LASER SCANNER

**2nd LASER  
SCANNER**  
for the automotive  
volume production



Valeo SCALA 3D Laser Scanner (Gen 2) kit is a plug and play kit developed to allow easy interfacing with the Valeo SCALA 2 lidar sensor to obtain the point cloud output of the sensor.

Valeo's SCALA 2 is the new generation of Valeo automotive grade laser scanner. This new generation provides increased vertical field of view and angular resolution. The SCALA 2 is a key enabler for ADAS and automated driving applications.

The Mobility Kit is a plug-and play system, including all necessary hardware to connect to an ethernet port on a personal computer, and decoder software.

## SPECIFICATIONS

SCALA 2 CHARACTERISTICS	
Laser class	Class 1
Wavelength	905 nm
Pulse duration and power	< 5 ns 80W max. peak power out

SCAN PATTERN	
Horizontal field of view	133°
Vertical field of view	10°
Scan rate	25 Hz
Number of layers	16 per scan 16+16 interlaced per scan pair

POWER	
Power supply	9 V -14 V DC, 2A
Power consumption	< 10W in steady state

PHYSICAL CHARACTERISTICS	
SCALA dimensions	68 × 150 × 107 mm (H × W × D)
With mounting brackets	137 × 191 × 123 mm (H × W × D)
SCALA 2 weight	750 g
Mounting bracket weight	400 g

INTERFACE	
SCALA unit	Ethernet

The kit includes one SCALA 2, mounting brackets and harness



SYSTEM COMPONENTS	
SCALA 2 unit	
Mounting bracket	
Harness (sensor to power)	

DATA	
Output	Point Cloud (raw data)

SOFTWARE & DRIVERS	
Visualization tool	Included
Windows / Linux version	Included
ROS filter	Included

RANGE (Lambertian 1m x 1m targets)		
Distance	Reflectivity	True positive rate
150m	10%	10%
100m	10%	50%
150m	80%	100%
200m	80%	55%

RESOLUTION	
Horizontal Angle	0.125° for +/- 15° 0.25° for +/-15° to +/-66.5°
Vertical Angle	0.6°
Distance	< 100mm

+/- (15~66.5)°

+/- 15°

