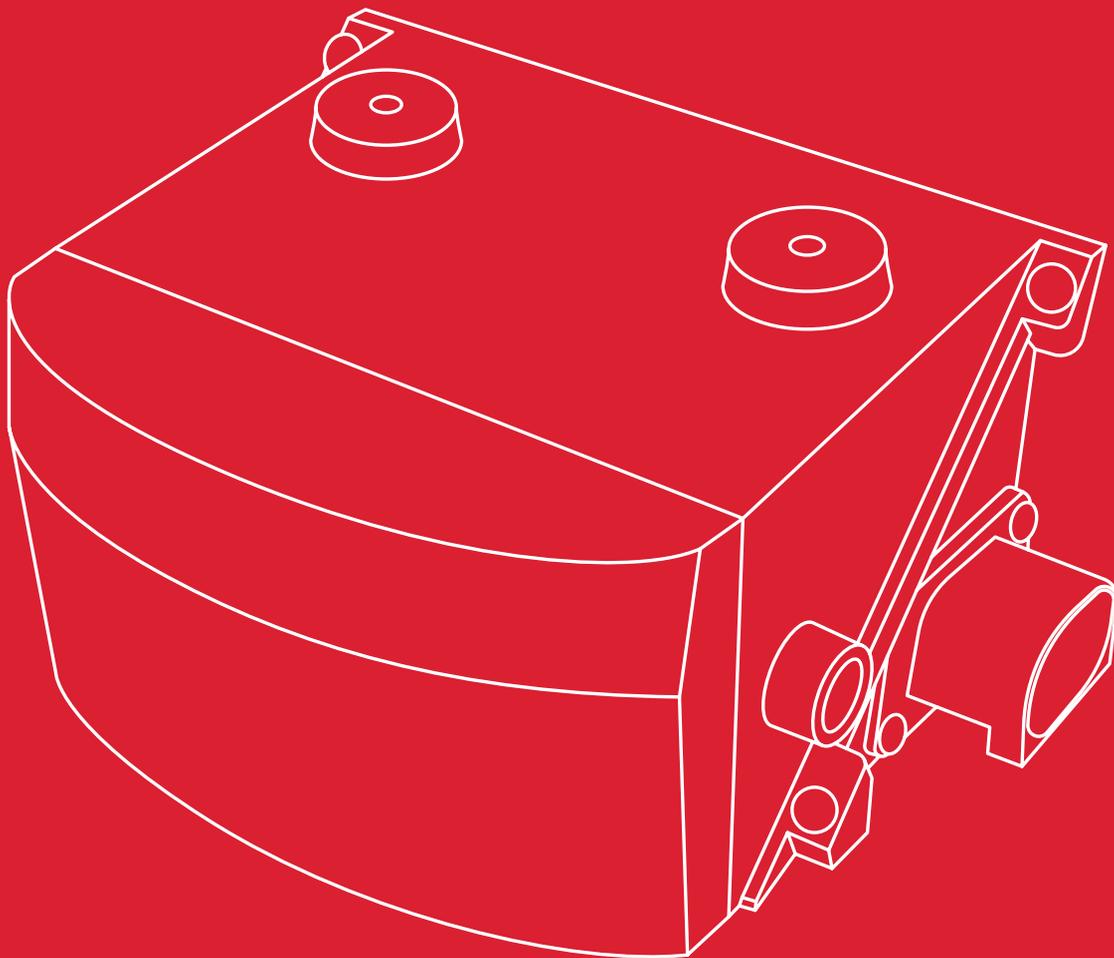


## ibeo ScaLa B3.0

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# DATA SHEET



This information has been put together with greatest care. However, any performance data given in this leaflet is subject to compliance with certain surrounding conditions and hence may vary from case to case. Further, we reserve the right to make changes at any time without notice. We strongly recommend (i) reconfirmation with Ibeo Automotive whether this information is still fully valid, before using it for final designs and (ii) to verify performance data taking into account the actual surrounding conditions. Ibeo Automotive takes no responsibility for any consequences due to non-compliance with these recommendations. (Subject to change without notice – 2017-07)

# TECHNICAL DATA

## LASER / OPTICAL

<b>Laser class:</b>	Class 1
<b>Wave length:</b>	905 nm
<b>Technology:</b>	Time of flight, Output of distance and echo pulse width
<b>Range:</b>	80 m / 262 ft @ 6.3% remission

## MEASUREMENT

<b>Horizontal field of view:</b>	145°
<b>Vertical field of view:</b>	3.2°
<b>Multi-layer:</b>	4 parallel scanning layers
<b>Multi echo:</b>	Up to 3 distance measurements per shot (allow measurements through atmospheric clutter like rain and dust)
<b>Data update rate:</b>	25.0 Hz
<b>Operating temperature range:</b>	-40° to 85° C / -40° to 185° F
<b>Accuracy (distance independent):</b>	< 10 cm / 3.9 in
<b>Angular resolution:</b>	Horizontal: up to 0.25° Vertical: 0.8°
<b>Distance Resolution:</b>	4 cm / 1.57 in

## SOFTWARE

<b>Raw data pre-processing (embedded):</b>	All measurements will be classified and tagged as valid / ground / clutter
<b>Real time object tracking (embedded):</b>	Object properties: position, size, speed
<b>Ego motion compensation (embedded):</b>	Requires vehicle ego motion data
<b>Fusion:</b>	Fusion of multiple sensors for 360° FOV is possible

## MECHANICAL / ELECTRICAL

<b>Power supply:</b>	9 to 16V
<b>Power consumption:</b>	6W (average)
<b>Dimensions (W x D x H):</b> - with connectors:	108 x 102 x 60 mm / 4.25 x 4.02 x 3.46 in 133 x 102 x 70 mm / 5.24 x 4.02 x 2.76 in
<b>Protection class:</b>	IP5K4K, IPX7, IPX9K

## DATA I / O

<b>Ethernet:</b>	Output: Raw- and object data Input: Configuration / time sync via NTP server
<b>CAN :</b>	Output: Object data Input: Ego motion data
<b>RS232:</b>	n/a