



Preliminary

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 – 2021-01)

TECHNICAL DATA

TECHNOLOGY / LASER / OPTICAL	
Technology	Direct time of flight - 4D Solid State LiDAR output of 3D distance and 1D echo intensity information (including confidence value)
Laser class	CLASS 1 laser product according to DIN EN 60825-1:2015-07
Wave length	885 nm
Range (10% remission)	Long range: 140 m Short range: 50 m
Range (pedestrian)	Long range: 200 m Short range: 50 m
Range (car)	Long range: 250 m Short range: 70 m
MEASUREMENT / SCAN PATTERN	
Resolution (horizontal x vertical)	128 x 80 px (uniform)
Field of view (horizontal x vertical)	Long range: 11.2° x 5.6° (7*) Short range: 60° x 30° (37.5*)
Angular resolution (horizontal x vertical)	Long range: 0.09° (0.04°)** x 0.07° Short range: 0.47° (0.23°)** x 0.38°
Maximum range	Programmable (typical Long range: 260 m / Short range: 80 m)
Scan pattern	Pure-electronic sequential row scan 128 channels in parallel
Measurement principle	Full-digital signal processing of time of flight raw histograms (no thresholds)
Multi-echo capability	Up to 3 echos per pixel (allow high-performance measurement in challenging environmental conditions, e.g. rain and dust)
Update rate	Fully programmable, typical 25 Hz
Operating temperature range	-40° C to 85° C
MECHANICAL / ELECTRICAL	
Supply voltage	12V / 24V
Power consumption	7-10 W
Dimensions (W x D x H)	108 x 102 x 83 mm
Protection class	IP6K9K
Weight	780 g
DATA I / O	
Point cloud output	100Base-T Ethernet
Configuration and control	Ethernet

*non-uniform resolution **interlaced

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