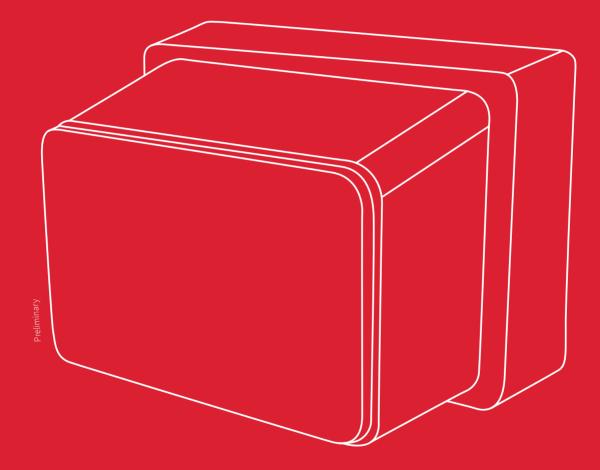




Solid-State Lidar



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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: 40 m	Near range: 25 m
Range (pedestrian)	Long range: 200 m	Short range: 50 m	Near range: 30 m
Range (car)	Long range: 250 m	Short range: 70 m	Near range: 40 m
Maximum range	Programmable (typical Long range: 250 m / Short range: 80 m / Near range: 40 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°)*	Near range: 120° x 60° (75°)*
Angular resolution (horizontal x vertical)	Long range: 0.09° (0.04°)** x 0.07°	Short range: 0.47° (0.23°)** x 0.38°	Near range: 0.94° (0.47°)** x 0.75°
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 echoes 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)	109 x 99 x 89 mm		
Protection class	IP6K9K		
Weight	650 g		
DATA I / O			
Point cloud output	100Base-T1 Ethernet		
Configuration and control	Ethernet		

*non-uniform resolution **interlaced

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