



400 m

Maximum Range

<5 mm

Accuracy

60 kHz

Pulse Rate

IP67

Ingress Protection

4 echoes

Multi-returns

90°

Field Of View



LiDAR for Automation

Long range, high accuracy, small spot size are the differentiating prerequisites for a remarkable LiDAR sensor.

The new SLP series is the ultimate solution delivering the full package combining efficiency and durability.



Best Quality Scanner

The commitment to provide innovative technology at the highest level of reliability and low-maintenance enables long-lasting outdoor solutions.

Today more than ever, your applications can rely on solid foundations.

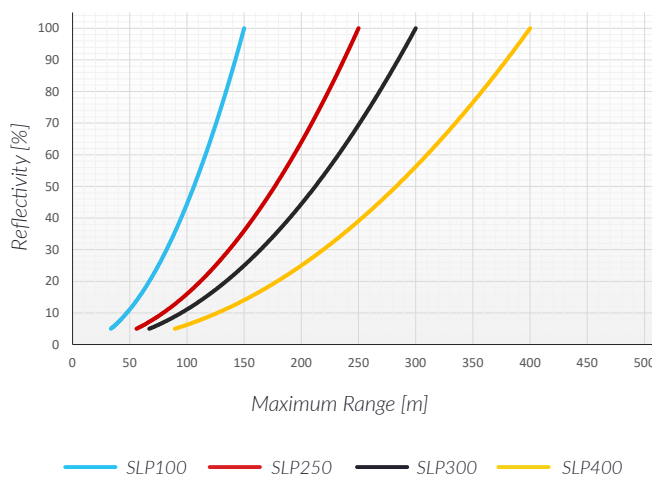
Technical Features

SLP Series

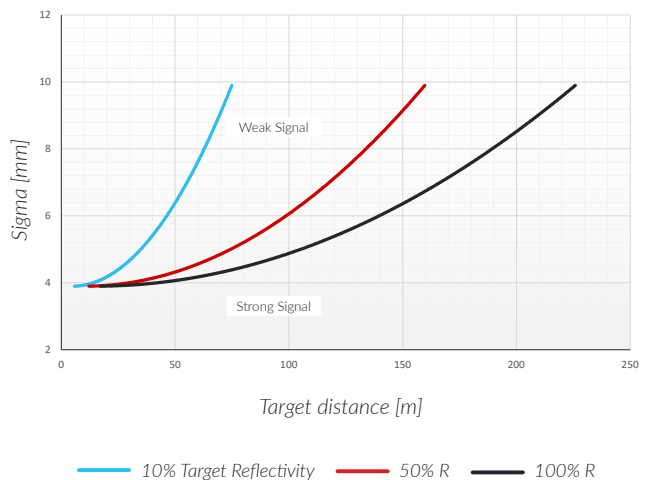
	SLP100	SLP250	SLP300	SLP400
WORKING RANGE				
Maximum range @ R=100%, Lambertian reflector (m)	150	250	300	400
Maximum range @ R=10%, Lambertian reflector (m)	45	80	95	120
Minimum range (m)	0.8	1.8	2.5	2.7
ACCURACY DATA				
Resolution (mm)	1	1	1	1
Repeatability 1 σ @ strong signal (mm)	5	5	5	6
Repeatability 1 σ @ weak signal (mm)	20	20	20	20
Accuracy (systematic error) (mm)	≤ 5	≤ 5	≤ 5	≤ 5
SPOT PROPERTIES				
Divergence in scan direction ($^{\circ}$)	0.041	0.076	0.096	0.143
Divergence perpendicular to scan direction ($^{\circ}$)	0.029	0.029	0.029	0.034
Spot close to the sensor window (mm)	12 x 18	12 x 18	12 x 18	12 x 19
Focusing distance (m)	45	45	45	45
SCAN PROPERTIES				
Maximum scan and profile angle ($^{\circ}$)	90			
Scan mirror type	4-mirrors polygon			
Maximum scanning duty cycle at 90 $^{\circ}$ FOV	50%			
MULTI-ECHO EVALUATION				
Number of evaluated and returned echoes	Up to 4			
ENVIRONMENT				
Surface temperature range	T < 500 $^{\circ}$ C			
Function in strong sunshine	Ambient light control			

DATA SPECIFICATIONS

SLPxxx: Target reflectivity vs Maximum range



SLP250: Sigma vs Target distance



Technical Features

SLP Series

	Fast	Normal	Fine	Interlaced	
SCAN MODES	Beam scan angle step (°)	0.18	0.09	0.045	0.0225
	Measurements in 90° scan (points)	500	1000	2000	1000
	Scan rate (Hz)	60	30	15	30
	Number of interlaced scans per profile	-	-	-	4
	Profile rate (Hz)	-	-	-	7.5
	Measurements per profile (points)	-	-	-	4000

SLPxxx		
LASER DATA	Measurement laser type	Pulse Laser Diode
	Wavelength (nm)	905
	Laser Eye Safety Class; EN 60825-1; 94,96,01	1
	Pulse rate (kHz)	Up to 60
HW / SW INTERFACES	Ethernet	TCP/UDP 100 Mb/s
	RS232	selectable Bauds, 8n1 (for 1PPS only)
	Digital outputs	2 x 3.3 to 5 VDC programmable - Isolated switching outputs
	Digital inputs	2 x 3.3 to 5 VDC programmable - Isolated inputs
	External encoder inputs	3.3 to 5 VDC TTL input, channels A/B/Z
	Ethernet address configuration	Static and DHCP
	Sensor configuration	Binary commands, Web interface
POWER SUPPLY	Power supply	24 VDC ± 5 VDC power supply
	Direct power supply	yes
	PoE power supply	yes
	Power consumption (W)	12 (heater off) 36 (heater on)
	Start-up time (s)	< 30
ENCLOSURE	Ingress Protection rating	IP67
	Operating temperature range	-30°C to +50°C
	Storage temperature range	-30°C to +70°C
	Enclosure	Aluminum die casting, seawater resistant, powder coated
	Front window	AR-coated glass
DESIGN	Height x Width x Length (mm)	247 x 121 x 109
	Weight (kg)	2.8

Options and Accessories

SLP Series

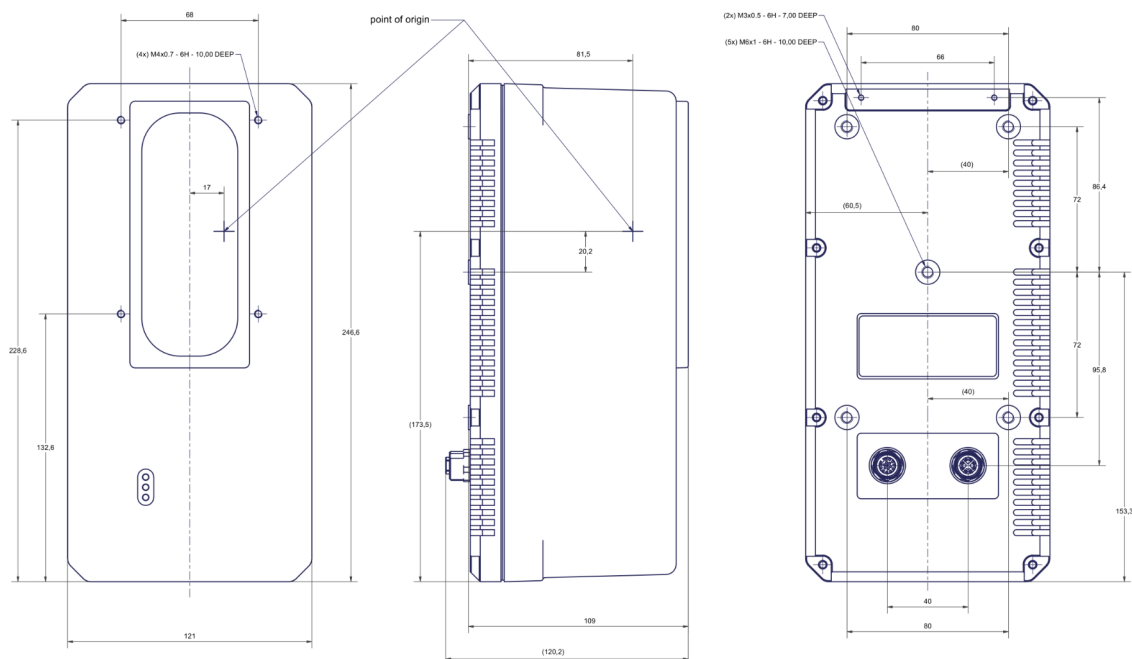
Article No.	Description
OP-FCXX-XA1X-00	Customized focus distance (selectable from 3 to 40 m)
AC-CBXX-0A1C-00	Multifunction cable without connectors, 5 m
AC-CBXX-1A2C-00	Multifunction cable with connectors, 5 m
AC-CBXX-XB1C-00	Data cable 8 pin Ethernet with POE support, 5 m
AC-CBXX-XD1A-00	Power cable for POE Injector, 2 m
AC-PWXX-XAXX-00	POE Injector
AC-HDXX-XAXX-01	Sensor holder, sensor FOV 90°-180°
AC-HDXX-XG1X-01	Sensor holder, sensor FOV 45°-135°
AC-PHXX-XA1X-00	Window Protection for scanner with FOV 90°, 1 scan line
AC-DKXX-XA5X-00	Developer kit for SLP

OPTIONS & ACCESSORIES

Note: Cables are available in various lengths. Contact us for further information.

Outline Drawing

SLP Series



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