SLP PRO

Datasheet

500 m
Maximum Range

<4 mm
Accuracy

100 kHz
Pulse Rate

IP67
Ingress Protection

120°
Field Of View

6 echoes
Multi-returns

LiDAR for Automation

The fastest and most accurate LiDAR with wide field of view for the outdoor automation.

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

The innovation is here

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

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

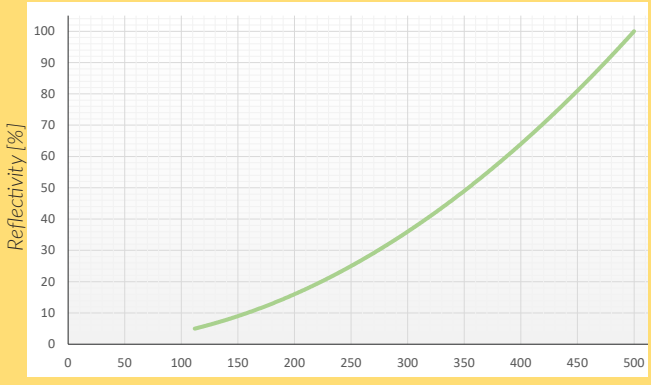
Technical Features

SLP PRO

DATA SPECIFICATIONS

	SLP PRO
WORKING RANGE	
Maximum range @ R=100%, Lambertian reflector (m)	500
Maximum range @ R=10%, Lambertian reflector (m)	160
Minimum range (m)	1.8
ACCURACY DATA	
Resolution (mm)	1
Repeatability 1 σ @ strong signal (mm)	≤ 4
Repeatability 1 σ @ weak signal (mm)	≤ 20
Accuracy (systematic error) (mm)	≤ 4
SPOT PROPERTIES	
Divergence in scan direction (°)	0.076
Divergence perpendicular to scan direction (°)	0.029
Spot close to the sensor window (mm)	12 x 18
Focusing distance (m)	45
SCAN PROPERTIES	
Maximum scan and profile angle (°)	120
Scan mirror type	4-mirrors polygon
Maximum scanning duty cycle at 120° FOV	66.7 %
MULTI-ECHO EVALUATION	
Number of evaluated and returned echoes	Up to 6
ENVIRONMENT	
Surface temperature range	T < 500°C
Function in strong sunshine	Ambient light control

SLP PRO: Target reflectivity vs Maximum range



SLP PRO: Sigma vs Target distance

Technical Features

SLP PRO

		Fast	Normal	Fine	Fast+	Normal+	Interlaced
SCAN MODES	Beam scan angle step (°)	0.18	0.09	0.036	0.144	0.072	0.018
	Measurements in 120° scan (points)	666	1333	3333	833	1666	1666
	Scan rate (Hz)	100	50	25	80	40	40
	Number of interlaced scans per profile	-	-	-	-	-	4
	Profile rate (Hz)	-	-	-	-	-	10
	Measurements per profile (points)	-	-	-	-	-	6664

		SLP PRO
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 100
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	with a software update
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 PRO

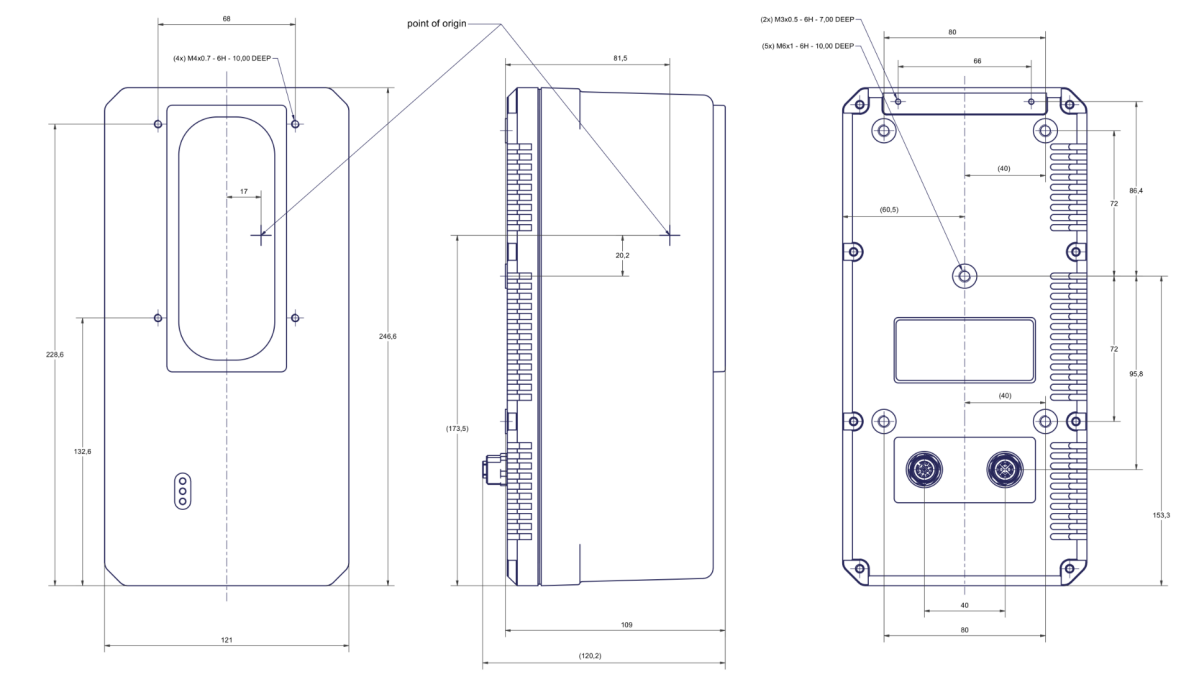
ACCESSORIES

Article No.	Description
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-HDXX-XAXX-01	Sensor holder, sensor FOV 90°-180°
AC-HDXX-XG1X-01	Sensor holder, sensor FOV 45°-135°
AC-DKXX-XA5X-00	Developer kit for SLP

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

Outline Drawing

SLP PRO



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