



**400 m**

Maximum Range

**<4 mm**

Accuracy

**125 kHz**

Pulse Rate

**IP65**

Ingress Protection

**120°**

Field Of View

**6 echoes**

Multi-returns



## LiDAR for Drones

Point density, accuracy, range and scan speed combined in one innovative LiDAR for the UAV market.

Unleash the power of Triple-IN's SLP LW in your solution.



## Data accuracy is a Must

Deliver the most accurate data point cloud for your projects. Right from the start.

Measure the difference with Triple-IN's SLP LW.

# Technical Features

SLP LW

SLP LW

DATA SPECIFICATIONS

## WORKING RANGE

Maximum range @ R=100%, Lambertian reflector (m)	400
Maximum range @ R=10%, Lambertian reflector (m)	130
Minimum range (m)	2

## ACCURACY DATA

Resolution (mm)	1
Repeatability 1 $\sigma$ @ strong signal (mm)	$\leq 3$
Repeatability 1 $\sigma$ @ weak signal (mm)	$\leq 20$
Accuracy (systematic error) (mm)	$\leq 4$

## SPOT PROPERTIES

Divergence in scan direction ( $^{\circ}$ )	0.076
Divergence perpendicular to scan direction ( $^{\circ}$ )	0.029
Spot close to the sensor window (mm)	12 x 18
Focusing distance (m)	45

## SCAN PROPERTIES

Maximum scan and profile angle ( $^{\circ}$ )	120
Scan mirror type	4-mirrors polygon
Maximum scanning duty cycle at 120 $^{\circ}$ FOV	66.7 %

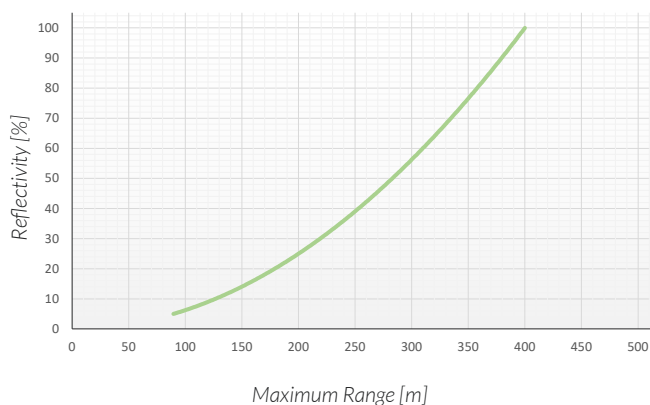
## MULTI-ECHO EVALUATION

Number of evaluated and returned echoes	Up to 6
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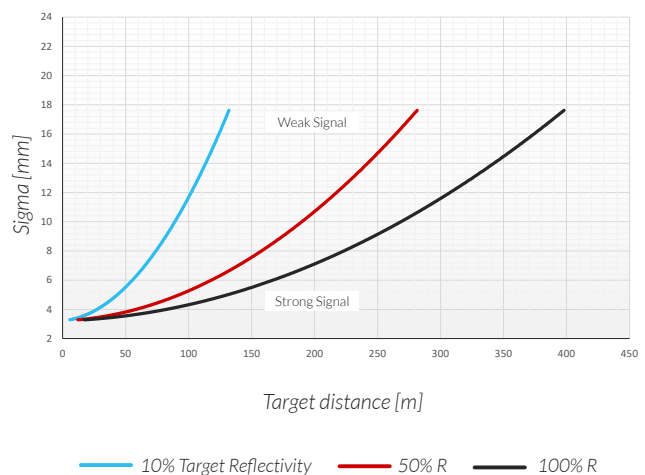
## ENVIRONMENT

Surface temperature range	T < 500 $^{\circ}$ C
Function in strong sunshine	Ambient light control

SLP LW: Target reflectivity vs Maximum range



SLP LW: Sigma vs Target distance



# Technical Features

SLP LW

	Fast	Normal	Fine	Fast+	Normal+	
SCAN	Beam scan angle step (°)	0.180	0.090	0.036	0.144	0.072
	Measurements in 120° scan (points)	666	1333	3333	833	1666
	Scan rate (Hz)	125	65.5	25	100	50
<b>SLP LW</b>						
LASER DATA	Measurement laser type	Pulse Laser Diode				
	Wavelength (nm)	905				
	Laser Eye Safety Class; EN60825-2014	1				
	Pulse rate (kHz)	Up to 125				
INTERFACES	Ethernet	TCP/UDP 1 Gb/s				
	RS232	Selectable Bauds, 8n1 (for 1PPS only)				
	Digital inputs	1 x 3.3 to 5 VDC programmable - Isolated inputs				
	Ethernet address configuration	Static and DHCP				
	Sensor configuration	Binary commands				
	Web interface	Yes				
POWER SUPPLY	Power supply	24 VDC power supply				
	Direct power supply	Yes				
	Power consumption (W)	12				
	Start-up time (s)	< 30				
ENCLOSURE	Ingress Protection rating	IP65				
	Operating temperature range	-10°C to +50°C				
	Storage temperature range	-10°C to +60°C				
	Enclosure	Plastic				
	Front window	AR-coated glass				
DESIGN	Height x Width x Length (mm)	245 x 125 x 111				
	Weight (kg)	< 1.4				

# Options and Accessories

SLP LW

	Article No.	Description
ACCESSORIES	AC-CBXX-1A4B-00	Developer cable for SLP LW, 2 m
	AC-CBXX-0C4P-00	Ethernet cable for SLP LW, 25 cm
	AC-CBXX-0D4P-00	Power cable for SLP LW, 25 cm

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