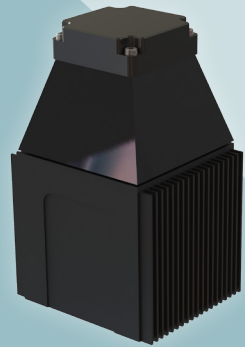




# LDR 905 SR



## DESCRIPTION

**LDR 905 SR sensor is the most advanced system in SensUp's LiDAR product range.**

Ultra-compact design, lightweight and low power consumption are all assets which make LDR 905 SR one of the best performing Real-time 2D mini LiDAR of the market.

This system is designed to fit UAV, UGV and USV "sense & avoid" applications.

## DATASHEET

### Optical specifications / Performances

Characteristics	Min.	Typ.	Max.	Units	Comments
Wavelength	-	905	-	nm	
Eye safety	Laser Class 1			-	Class 1, EN60825-1 v2014 standard
Number of Channels	1			-	
Scanning plane	Horizontal or vertical			-	Dual return capability
Beam divergence	-	3	-	mrad	
Detection Range *	0.2	-	30	m	@ 10% Reflectivity
Accuracy on distance	-	5	-	cm	+/- 2 $\sigma$
Field of View	0	-	270	°	
Measurement step	-	8 192	-		
Angular Resolution	-	0.05	-	°	360° / 8 192
Rotation frequency	20	25	50	Hz	From 1 200 to 3 000 RPM
Measurement rate	30			kHz	
Angular step	-	0.3	-	°	With a 25 Hz Rotation Frequency

### Communication

Characteristics	Min.	Typ.	Max.	Units	Comments
Communication interface	-	Ethernet RJ45	-	-	TCP/IP or UDP Server update via USB Port

### Electrical specifications

Characteristics	Min.	Typ.	Max.	Units	Comments
Supply Voltage	12	-	24	V	
Power Consumption	-	4	-	W	

### Mechanical and environmental specifications

Characteristics	Min.	Typ.	Max.	Units	Comments
Dimensions	-	107 x 67 x 57	-	mm	
Weight	-	250	-	g	
External interface	IP64			-	IP67 on request
Operating temperature	-10	-	40	°C	
Storage temperature	-25	-	75	°C	

### Standards

Characteristics	Min.	Typ.	Max.	Units	Comments
Vibration resistance	-	-	-	-	" 10-55 Hz double amp 1,5 mm in each for 2 hrs 55-220 Hz 98 m/s <sup>2</sup> sweep of 2 min in each directions
Shock/Impact resistance	-	-	-	-	196 m/s <sup>2</sup> 10 times in each directions

(\*) Depends on visibility