

LL-60A LineLIDAR for Snowy Roads and Tracks

Noptel

The compact and lightweight LL-60A LineLIDAR sensor features nitrogen filled gas-tight IP68 design enabling reliable operation under varying temperature and environmental conditions.

This accurate sensor is feasible for snow quantity monitoring on roads and tracks enabling timely snow ploughing tasks.

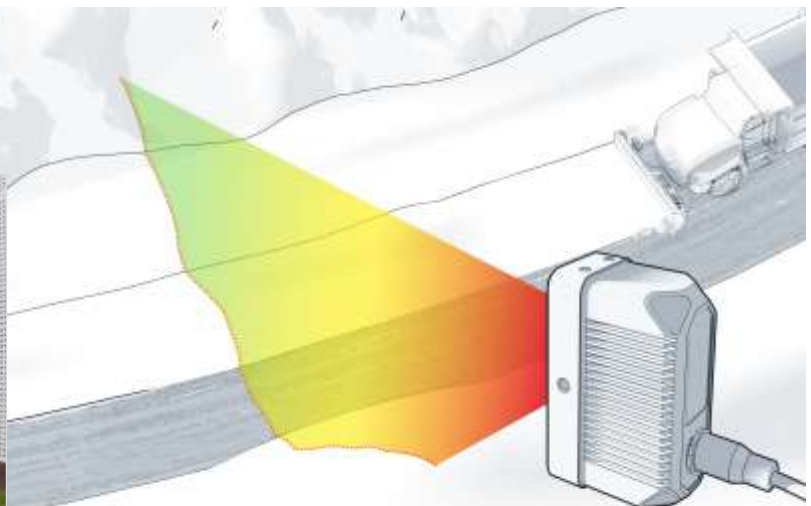
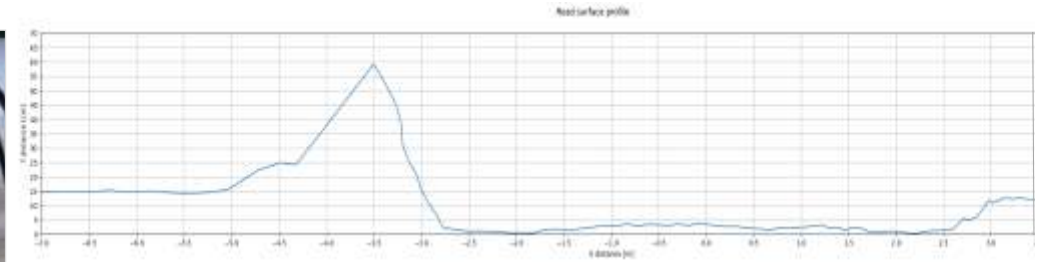


Features

- up to 40 m range
- up to 400 profiles per second
- 60 degree FOV, mm level precision
- angular resolution 0.23 deg
- ethernet connection
- low power consumption
- solid state construction

Applications e.g.

- Snow quantity monitoring
- Winter maintenance quality control
- Snow plough control
- Road and track traffic rerouting
- Input to road weather models



LL-60A LineLIDAR



Technical specifications

Performance Characteristics	Unit	LL-60A	Note
Wavelength	nm	905	Laser safety class 1, (IEC 60825-1:2014)
Profiles per second	Hz	10 - 400	
Horizontal FOV	deg	60	
Horizontal Angular Resolution	deg	0.23	
Vertical FOV	deg	0.1	
Minimum Range	m	1.7	
Maximum Range	m	96	Maximum possible reading
Number of Echoes	-	3	

Typical Performance	Settings		LL-60A	
Value Unit	Sample Rate Hz	Target Reflectivity %	Range m	Precision mm
Range and Precision <small>Strong backlight radiation may reduce performance.</small>	10	54	6	2.2
	10	9	45	10
	10	54	85	25
	400	54	20	25
	400	9	8	10

Mechanical characteristics	Unit	LL-60A	Note
Size (L/W/H)	mm	69 x 94 x 41	
Weight	g	370	
Attachment	pcs	6 / 2	M4 / 1/4"-20 UNC, Doc.Y10044
IP Protection	-	IP68	Nitrogen filled
Case Material	-	Aluminium	

Electrical characteristics	Unit	LL-60A	Note
Connector Type	-	M12	
Interface	-	Ethernet	100 Mbit, UDP
Supply Voltage	V	10 - 30	
Supply Power	W	<2 / <4	Standby / Operational
Transmitter Laser Lifetime	h	80000	

Environment and safety	Unit	LL-60A	Note
Laser Safety Class	-	1	Classification standard (IEC 60825-1:2014)
RoHS Compliance	-	Yes	Directive 2015/863/EU amending directive 2011/65/EU
REACH Compliance	-	Yes	The European Directive REACH 2006/1907/EC
Operating Temperature	°C	-30 ... +60	
Storage Temperature	°C	-40 ... +71	

Specifications are subject to change without notice. Doc.: M50149EE ©Noptel 2024