

LRX-25A Laser Rangefinder Module

Noptel

- Compact and lightweight sensor
- Highly integrated technology
- For harsh environmental conditions
- Pulsed time-of-flight measurement
- Low power consumption
- Max. range 32 km
- Standard serial interface
- Easy integration to mobile or stationary systems
- Laser wavelength 1.5 μm
- Wide temperature range
- Shock and vibration resistant
- Eye safe operation
- Available without enclosure for OEM applications



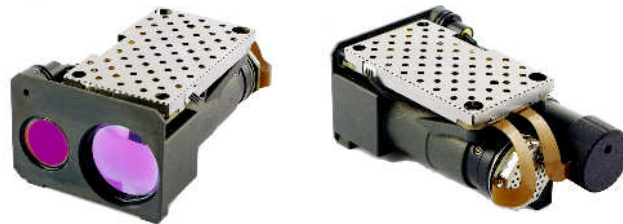
The compact, eye safe and highly integrated LRX laser rangefinder is utilized in various applications, from demanding military measurements to handheld devices.

The unit is delivered without enclosure providing especially for the OEM-users the possibility to embed the unit into their own product or device.

Applications

- Reconnaissance
- Observation & surveillance
- Target acquisition
- Fire control
- Naval systems
- Drones & UAVs
- Handheld devices
- Vehicle mounted systems

Noptel LRX-25A Laser Rangefinder Module



Technical specifications

Performance Characteristics	Unit	LRX-25A	Note
Laser safety class	-	1	Eye safe
Wavelength	µm	1.5	
Measurement range	m	50 - 32 000	
Measurement range Standard target	m	10 000	Target size 2.3 x 2.3 m, visibility 15 km, target reflectivity 30%, detection probability >90%
Extinction ratio	dB	41.0	Large target @ 500 m, visibility 23 km, target reflectivity 85%
Measurement time	s	0.7 / 1.7	Typical / Max. performance measurement two times in ten seconds due to eye-safety
Continuous measurement rates	Hz	1, 4, 10, 20, 100, 200	With reduced measurement ranges
Precision	m	0.5 - 1.5	Depending on the distance and target reflectivity
Beam divergence	mrad	0.35	
False detection rate	%	< 1	
Target discrimination	m	< 30	Depending on the received signal level
Range gating resolution	m	1	
Operating temperature	°C	-32 - +60	
Storage temperature	°C	-40 - +71	

Mechanical characteristics	Unit	LRX-25A	Note
Size (L/W/H)	mm	88 x 53 x 37	
Weight	g	136	
Alignment retention	mrad	0.2	Within operating temperature range
Alignment pointer	nm	635	Laser Class 1
IP Protection	-	N/A	

Electrical characteristics	Unit	LRX-25A	Note
Serial interface	-	RS422	Connector type: Molex 53261-1071
Supply voltage	V	7 - 30	
Start-up time	ms	< 50	
Power consumption during measurement	W	< 4	
Power consumption in Stand-by mode	W	< 0.2	Unit can be completely shut down by external signal to further minimize power consumption

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