



- * *Laser radar scanner working in the 4-400 meter distance range with high accuracy*
- * *High speed scanning and high measurement speed*
- * *Scans a scene in a 3D profile like a radar system but with laser light and no radar*
- * *Detects and check predetermined areas for obstacles and intruders*
- * *Adjustable alarm levels based on position and size of target / obstacle*
- * *Invisible laser beam impossible to see by the bare eye, no beam stop at far end*
- * *Fail safe thinking for demanding applications in rail roads and security*
- * *Output by relay, RS 232 interface, wire less link, GSM Phone or SMS messaging*

LaserGrab is produced and developed by Laseroptronix and we have been working with laser radar systems since over 10 years. This system is available in several configurations with different specifications and performance. The main difference between the different models is the distance meter unit and computing performance. There is no general system making all problems easy to solve and a careful analyse is always needed before the choice is done.

LaserGrab can scan in speeds of less 1 scan per sec to 50 scans per sec and we use similar mechanics for this and change the motor and encoder upon demands.

LaserGrab can measure the distance from the short range systems of about 25-50 meter to over 1000 meter for long range systems. Resolution can differ from a few cm to 1-2 meter depending on what distance meter we select.

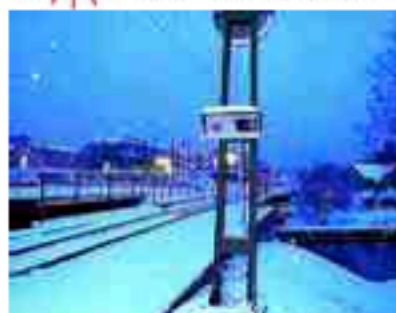
Output can be a string with a distance value and an angle from the encoder and this is for qualified OEM users. We can also supply solutions with a microprocessor , PLC or a PC with or without software.

This is not to easy so we want a communication with our customer about what is the best solution for their application. The software is a key form all and we have long experience in smart dynamic filters which helps a lot.

For special applications we have special models with its own data sheets. Pls. contact us for more details

Many of our productr.

Datablad nr LasersGrabEng 2005 10 30



Obstacle detection in rail road crossing by Ladar system



Control of stop position when docking air crafts to gate



Alarm system for people falling on the rail tracks in a station

Technical specifications LaserGrab laser radar system

Model	LaserGrab LG400	LaserGrab LG 700
Distance range 30% R target	1-400 meter	4-700 meter
Distance resolution	+/- 10 cm at +/- 1 Sigma	1 meter
Internal measurement speed	1000 Hz	200 Hz
	Optional 5000 Hz for LG 400	
Scanning angle	Adjustable mechanically from zero to 60 degree	
Angular resolution	Less 0,1 degree	Less 0.1 degree
Scanning speed	Depending on motor and gear box 1 Hz to 50 Hz	
Response time for alarm	Less 1 sec	1-5 sec
Alarm output	Relay for alarm	Relay for alarm
Standard communication	RS 232 for control and settings	Se left
Optional communication	GSM phone and / or SMS messaging	Se left
Beam diameter at exit	22 mm	25 mm
Beam diameter at 100 meter distance	25 cm	30 cm
Laser wavelength	905 nm near IR	905 nm near IR
Laser safety class	Class 1	Class 1
Laser model	Pulsed Laser diode	Pulsed Laser diode
Aiming system	Optional camera sights or other aiming system	
Temperature range In Celsius (C)	-10 to + 50 degree	- 10 to + 50 degree
Temperature options standard	From - 50 degree c to + 80 degree C by coolers and heaters	
Encapsulation	IP54 Steel cabinet	IP 54 Steel cabinet
Dimensions	450x300x150 mm	450x00x150 mm
Weight	7 Kg	7 Kg
Humidity non condensing	0-100%	0-100 %
Integrated heater for stop condensing	Optional	Optional
Colour	Gray or black or what is preferred by the application	

These systems are available in many more models. Pls. contact us for more information about your application.

Many of our products are protected by patents and other rights

Data sheet nr LasersGrab 2005 10 30