

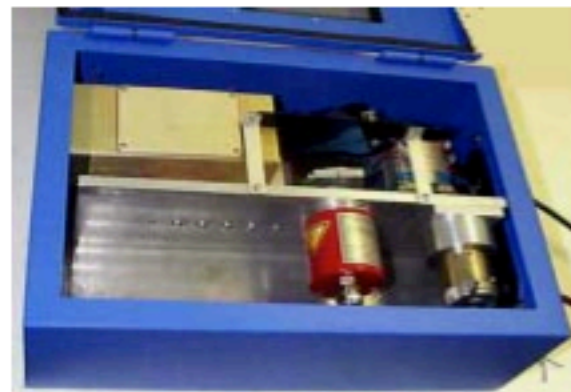
- * Laser radar system for detecting persons and obstacles and objects on the rail
- * High resolution and long range covering large areas with a single unit
- * Simple operation and installation and redundant technology for fail safe thinking
- * Detects persons on the rail and gives automatic alarms to stop train etc.

LaserGrab PLS 60 is an ideal laser scanner for detecting of obstacles and persons on the rail tracks near stations and other places with danger. This system operates with a scanning laser distance meter often called a Ladar system. By measuring the distance to anything giving a reflex and the angle this is a 3D profile over an area. All objects in this area gives a reflex when hit by the laser distance meter beam. The normal condition of the area is stored in the system and all differences over the static image represents a difference in the scene and if the difference corresponds to what is set as an obstacle this activated an alarm.

LaserGrab can measure up to over 500 meter in other applications but this safety applications limits spec to 200 meter in distance range. This is large enough to cover any normal platform. The normal installation is having 2 systems opposite installed and overlaps the area to a high degree. This eliminates shadow area to a high degree and admits smaller objects to be detected.

LaserGrab can see a less 200x200 mm sized objects all over the scanned area in a time of between 1 sec and 5 sec depending on settings and the model used. We recommend to have the optional camera installed so when there is an alarm an alarm operator can see what it is and make a decision what to do.

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Technical specifications LaserGrab PLS60 laser radar system

	PLS60 HS	PLS60 LC
Model	PLS60 HS	PLS60 LC
Distance range 20% R target	4-200 meter	4-200 meter
Distance resolution	+/- 10 cm at +/- 1 Sigma	1 meter
Internal measurement speed	1000 Hz	200 Hz
	Optional 5000 Hz for LG 400 based models	
Scanning angle	Adjustable mechanically from zero to 60 degree	
Angular resolution	Less 0,1 degree	Less 0.1 degree
Scanning speed	5 Hz	1 Hz
Response time for alarm	Less 0,5 sec	2-5 sec
Alarm output	Relay for alarm	Relay for alarm
Standard communication	RS 232 for control and settings	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 different models. We can offer fail safe systems based on Laser radar.

Pls. contact us for mote information and a discussion about your specific needs.

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