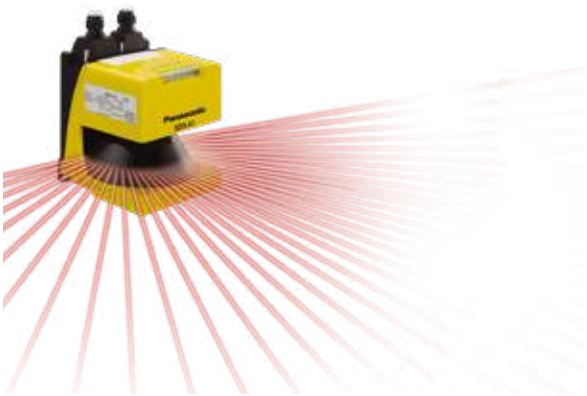


SD3-A1

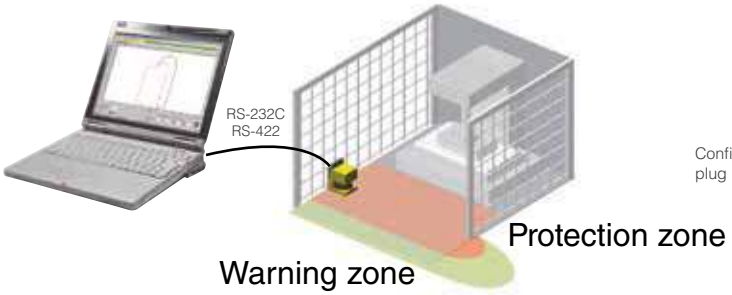
Type 3 · PLd · SIL2

Monitor dangerous areas for unauthorized entry using flexible detection zones!

Features

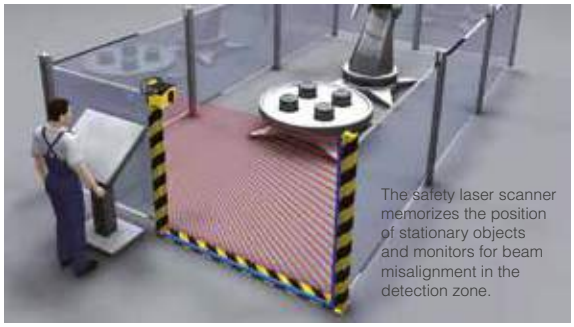
Freely configurable zones

Two zones can be monitored with the SD3-A1: the warning zone within a radius of 15m, and the protection zone within a radius of 4m. You can configure the contours of these zones to perfectly accomodate any application. You can configure up to eight zone patterns and switch between them at any given time, even during operation. This flexible zone configuration can be done by PC.



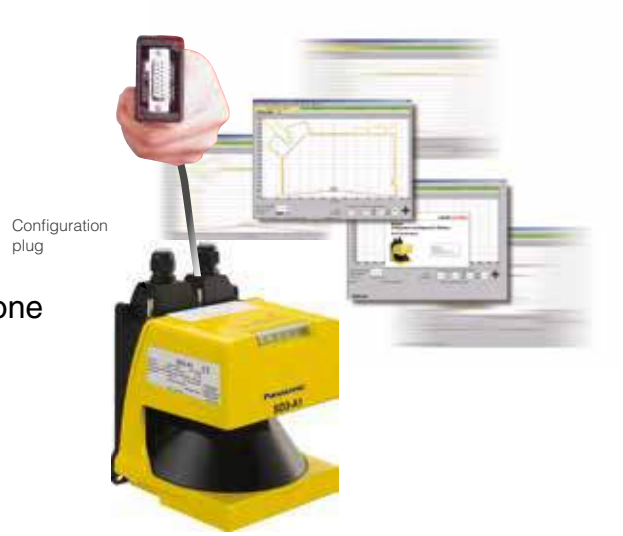
Monitors beam misalignment after installation of safety laser scanner

By activating the reference boundary function which enables constant detection of stationary objects, the safety laser scanner memorizes the position of stationary objects, and monitors for beam misalignment after installation.


The safety laser scanner memorizes the position of stationary objects and monitors for beam misalignment in the detection zone.

Adjustment of response times enables interference prevention

The response time can be adjusted from 80 to 640ms. Mutual interference can be prevented by adjusting the response time when setting up multiple safety laser scanners in close vicinity.



Memorized configurations make post-maintenance recovery easy (optional)

Configurations can be saved in the optional configuration plug's built-in memory and reloaded after maintenance or exchanging safety laser scanners.

Typical applications

Detecting entry into dangerous areas at processing machines
Warning and machine halt zones are implemented to detect workers in dangerous areas.

Confirming safety around automatically guided vehicles
The scanner is used to slow down the vehicle upon detection in the warning zone and stop the vehicle upon entering the protection zone.

Detecting presence in a defined field
Install two safety laser scanners to build a protection zone surrounding the object in question. Deactivating the zone is also possible.

Guarding the sides of automatic guided vehicles (AGV)
Prevent injuries from a moving AGV. Monitor fallen cargo to avoid collisions.

Detecting entry into dangerous areas of circular cycle tables
One safety laser scanner can safeguard the front opening where in the past two sets of light curtains were needed.

Detecting entry into robot working areas
The scanner detects a human body whenever it enters the field.

Technical specifications

Type		**Safety laser scanner**				
Model no.		**SD3-A1**				
Safety category		**Type 3, PLd, SIL2**				
Protection zone	**Object to be sensed**	ø150mm	ø70mm	ø50mm	ø40mm	ø30mm
	Sensing range (radius)	0 to 4.0m	0 to 4.0m	0 to 2.8m	0 to 2.2m	0 to 1.6m
Warning zone	**Object to be sensed**	ø150mm (fixed)				
	Sensing range (radius)	0 to 15m				
Scanning angle		190° / 180° (by setting)				
Measurement zone		Max. (radius) 50m				
Number of zone settings		Max. 7 + 1 (without detection zone)				
Min. zone setting range		200mm				
Power supply		24V DC+20/–30%				
Control outputs		OSSD 1 and OSSD 2 (2x PNP open collector transistor outputs; max. 250mA)				
Laser protection class		Class 1 (IEC)				
Protection		IP65 (IEC)				
Ambient temperature		0 to +55°C				
Material		Main body: die-cast aluminum, Scanner window: plastic				
Accessories		15-pin connector, 9-pin connector, installation and instruction manual, configuration and evaluation software, mounting screws				