

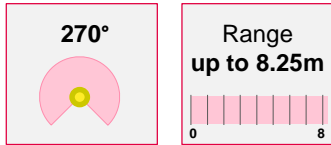
RSL 400 Safety Laser Scanner

Intelligent solutions
up to 8.25m range

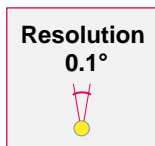


RSL 400

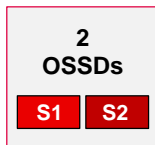
Best of It's Class



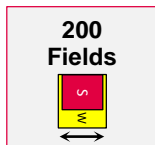
- **270° scanning angle and 8.25 m range**
 - For large areas up to 160 m²
 - Safeguarding of long sides with just one unit, even ,around the corner'



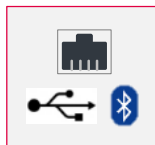
- **Newest technology with 0.1° angular resolution**
 - Highly robust against dust and particles
 - Ensures high availability



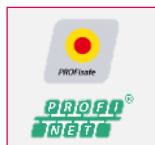
- **Two autonomous protective functions in one unit**
Two OSSD-pairs operating independently enable one RSL 400 to work like two single scanners



- **200 configurable fields**
100 switchable field pairs or 50 switchable 4-field sets for optimum support of various movement situations and different loads, e.g. at AGVs or robots



- **Three communication interfaces**
Ethernet TCP/IP, USB and Bluetooth interfaces for comfortable and time saving set-up and diagnosis



- **PROFIsafe / PROFINET**
 - Easy integration into industrial networks
 - Parallel monitoring of 4 protective fields
 - 3x M12 or AIDA compliant connection units



RSL 400

Newest technology for robust operation

- **Angular resolution of 0.1 degree**

 - Entire optical transmitter-receiver system is rotating
 - Enables high angular resolution of 0.1 degree
 - Generates particularly uniform laser spot over entire angular scanning range

- **Robust versus particles = high availability**

 - Distinguishes smaller particles from persons/objects due to high angular resolution
 - Reduces unnecessary switch-offs and thus increases availability

- **High quality measurement data for AGV navigation software**

 - Distance values with low systematic and statistical error (typ. < 30mm)
 - Small laser spot over entire angular scanning range reduces risk of incorrect measurements, e.g. at edges or wholes
 - No impact of object reflectance like black/ white/ reflector on distance values



RSL 400

Unrivaled in easy handling

Easy Mounting

- Detachable connection unit with space saving cable routing options, can be mounted separately
- Quick sensor exchange in < 30 seconds
Quarter-turn 2 quick locks – sensor is ready for exchange.
No re-alignment nor re-programming required, configuration memory is located inside connection unit



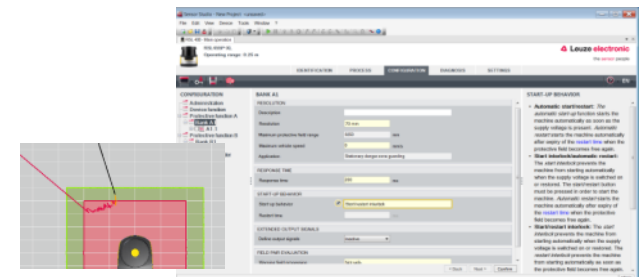
Always informed with integrated display

- Integrated display with clear status messages, easy to read also from a distance
- Built-in spirit level for quick and reliable alignment without PC or other tools



Efficient software with helping tools

- „Sensor Studio“ configuration and diagnosis software guides the user through the relevant settings in 5 steps
- Context sensitive online-help functions for quick understanding of parameters and settings
- Select from 9 different languages

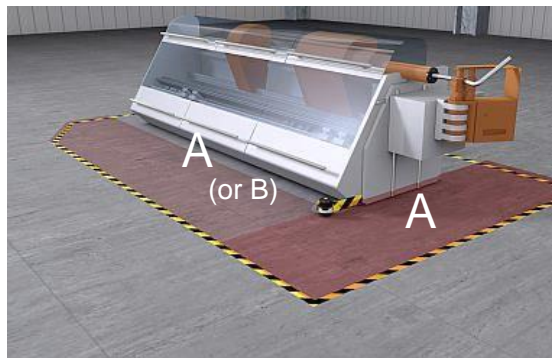


RSL 400 Applications

Efficient Solutions



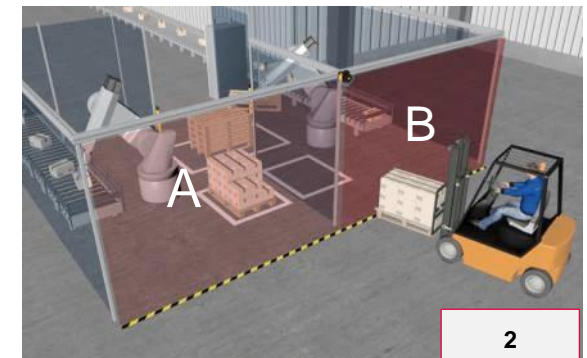
- In many cases one RSL 400 can cover tasks where 2 scanners were needed before



- 8.25m operating range and 270° scanning angle
- Enables area guarding of stretched areas even 'around the corner' with one scanner only



- Large operating range of up to 8.25 m
- Area guarding of up to 160 m² with just one scanner



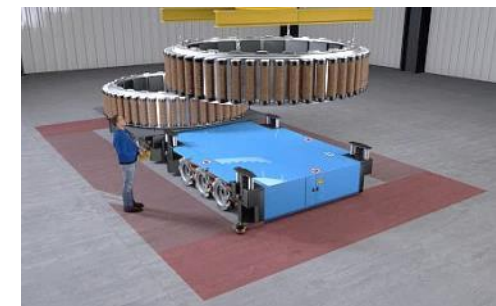
2
OSSDs
S1 S2

- 2 autonomous protective functions (A+B)
- Operates like two single scanners in one unit
- Overlapping fields supported

RSL 400 Applications


Efficient Solutions – AGVs





- **200 configurable fields**
Optimum adaptation to different movement patterns and size of loads with 100 switchable field pairs and 50 switchable 4-field sets
- **Safe speed reduction**
with parallel monitoring of multiple protective fields
- **Complete safeguarding with only 2 scanners**
even for large AGVs due to long range and 270° scanning angle
- **Integrated high quality data output**
Output of high quality distance and signal strength values with 0.1 degree angular resolution. For reliable support of navigation software without the need of an additional scanner.
For navigation software using natural navigation technology.



RSL 400

Flexible to match your applications



	RSL 410	RSL 420 / 425	RSL 420P 	RSL 430	RSL 440 / 445	RSL 450P / 455P 
Ranges:	3.0 m - 4.5 m - 6.25 m - 8.25 m					
Scanning angle:	270°					
Parallel protective functions 	1 OSSD Pair 1 protective function		PROFiSafe 1 safe field	2 OSSD Pairs 2 protective functions		PROFiSafe 4 safe fields
Field pairs / 4-field sets Switchable 	1 / 1	10 / 10		10+10 / 10	100 / 50	
Sensor configurations	1			2	10	
I/Os, configurable	3	4	Status/ Alarms via PROFINET	9	9	Status/ Alarms via PROFINET
Emergency stop linkage	-	■	-	■	■	-
Data output, optimized for navigation software	-	- 420 ■ 425	-	-	- 440 ■ 445	- 450 ■ 455
Connection unit x = 5/ 10/ 25m cable length	CU408-M12 CU405-2M12	CU416-x Cable / connector	CU400P-3M12 CU400P-AIDA Copper / OF	CU429-x Cable / connector	CU429-x Cable / connector	CU400P-3M12 CU400P-AIDA Copper / OF

SMART
SENSOR
BUSINESS

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the **sensor** people