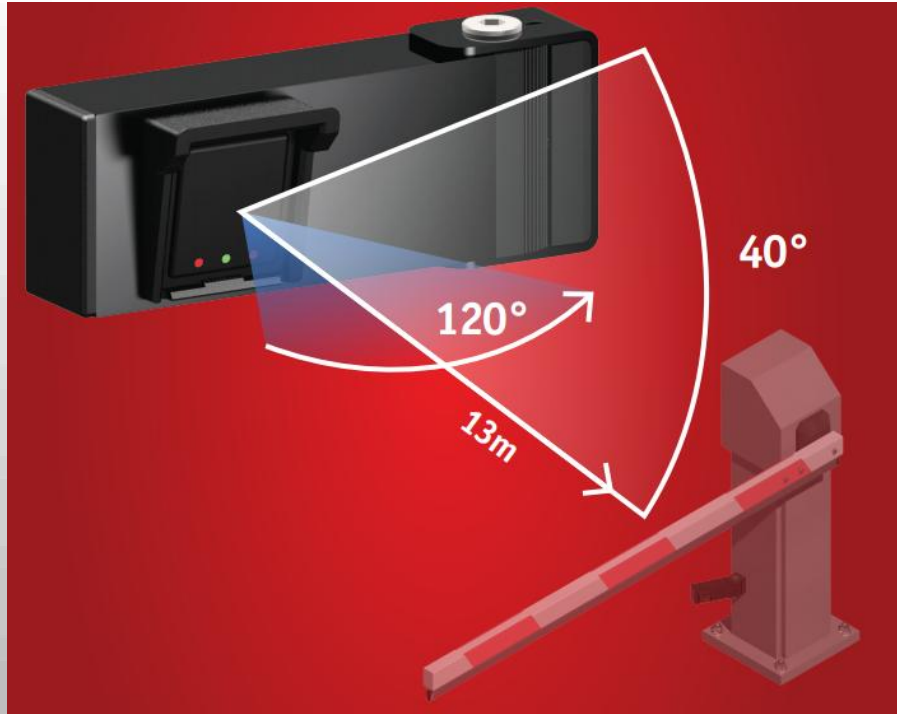


LISENS *scan* – Product line Information



LISENS *scan* – What is it ?

- Non-Contact Safety Radar System
- Utilises proven FMCW radar technology
- Applicable to Doors/Gates/Barriers
- Replaces safety edges, photocells & ground Loops

Two versions will be launched:-

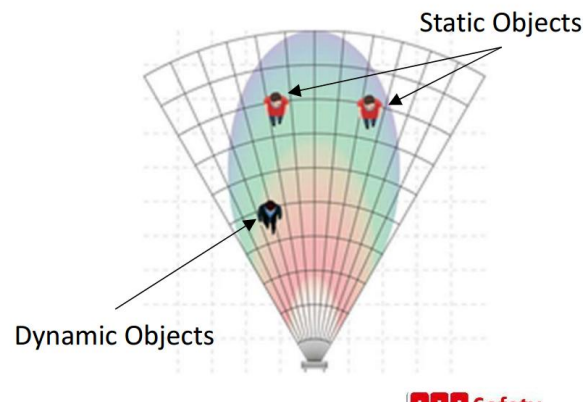
- “Comfort” (EN12453 type D device) – Loop/Beams
- “Safety” (EN12453 type E device) – Full SAFETY



LISENS scan– What is FMCW radar ? Why use it ?

- **RADAR = Radio Detection And Ranging**
 - Microwaves in GHz frequenz with speed of light → **Not** laser technology!

FEATURES	RADAR	LASER
Application flexibility	BEST	BAD
Resistance to moisture, dirt and temperature	BEST	BAD
Speed detection	BEST	BEST
Accuracy sensitivity	BEST	BEST
Resolution (separability)	BEST	BEST
Direction capability	BEST	BAD
Distance measurement	BEST	BEST
Penetration of materials	BEST	BAD
Size of solutions	BEST	BAD



FMCW = Frequency Modulated Continuous Wave

- Accurately detects & tracks multiple objects and persons
- Clear advantages of laser technology
- Flexible and discreet sensor's (compact dimensions)

LISENS scan– What does Type “D” & “E” mean ?

EN12453 Extract Explanation:-

- Minimum level of protection = **Type C + D device** (Force limitation + Photocells)
- Non-contact complete protection = **Type E device** (Full non-contact safety)
- Almost ALL gates/doors/barriers = **“Automatic control” + “Untrained users”**

Table 1 — Minimum levels of safeguarding at main edge

Type of door activation	Types of use		
	Trained users (no public) Type 1	Trained users (public) Type 2	Untrained users Type 3
Hold to run control	A	B	not possible
Impulse activation in sight of the door	C or E	C or E	C and D, or E
Impulse activation out of sight of the door	C or E	C and D, or E	C and D, or E
Automatic control	C and D, or E	C and D, or E	C and D, or E

LISENS *scan*– Key benefits



Up to 13 Meters Range (beats the competition)



Multiple Sensors Per System (using only 1 Controller)



Wi-Fi Configuration on-board (controller)



Webserver interface (not limited to smartphones)



Works with pendulum (pogo), skirts & boom rests



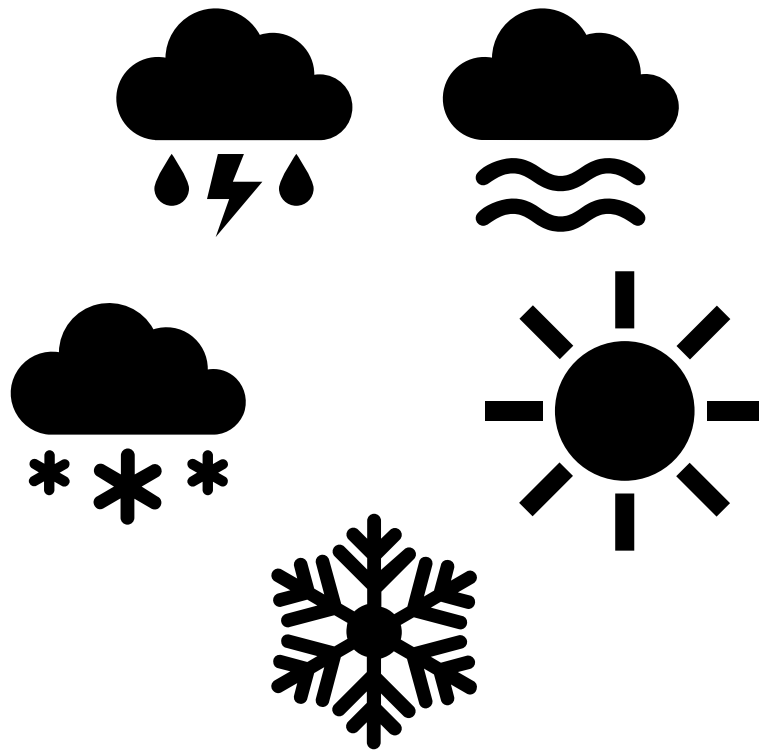
Insensitive to all weather conditions (laser's not)



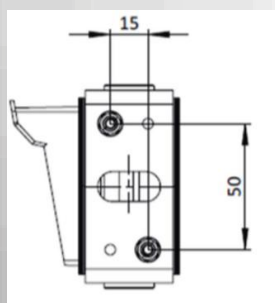
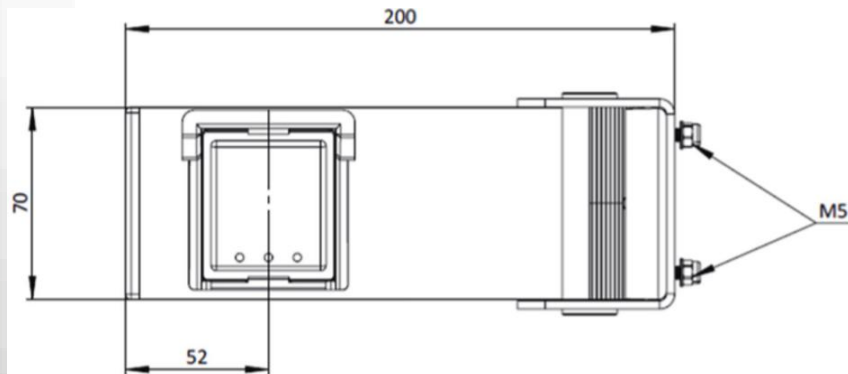
Vandal resistant design – IP67 protection rating



5 Safety outputs (2 x Safety relays + 3 x Comfort relays)



LISENS *scan* – Sensor (+ Bracket)



M8 Male	Connection to Control Unit
M8 Female	Connection to additional sensor/End Terminator



Power



SAFETY



Warning

LISENS *scan* – Controller



Control Unit
DIN rail mount

13	14	23	24
B1	B2	R1	R2

- Power
- SAFETY
- Warning

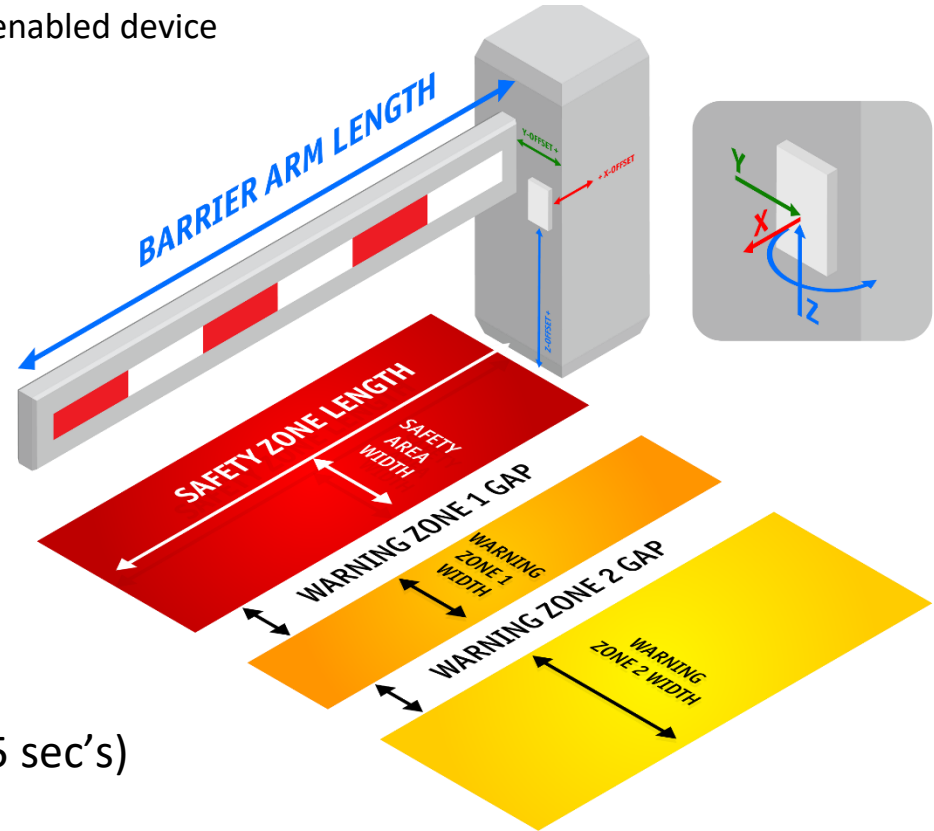
C+	CH	CL	C-
F1	F2	F3	F4

13	Safety Zone R1 – NC/8K2/FSS
14	Safety Zone R1 – NC/8K2/FSS
23	Safety Zone R2 – NC/8K2/FSS
24	Safety Zone R2 – NC/8K2/FSS
B1	Power Supply +
B2	Power Supply -
R1	AUX Relay (SZ) – NC/NO
R2	AUX Relay (SZ) – NC/NO
C+	CAN connection Sensor
CH	CAN connection Sensor
CL	CAN connection Sensor
C-	CAN connection Sensor
F1	Comfort Zone 1 Relay – NC/NO
F2	Comfort Zone 1 Relay – NC/NO
F3	Comfort Zone 2 Relay – NC/NO
F4	Comfort Zone 2 Relay – NC/NO

LISENS *scan* – How is it setup ?

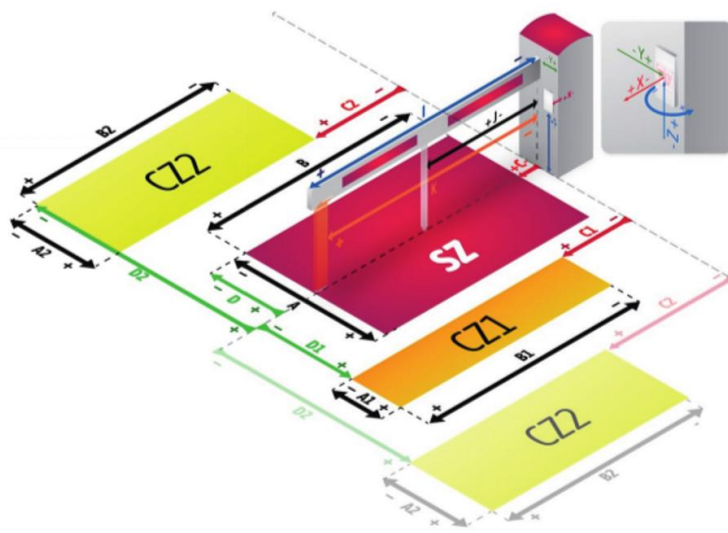
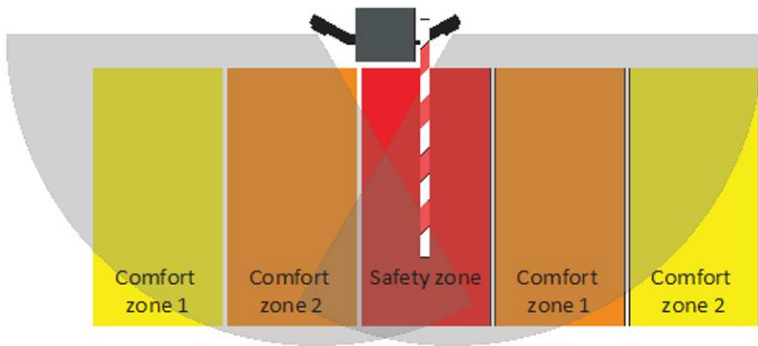
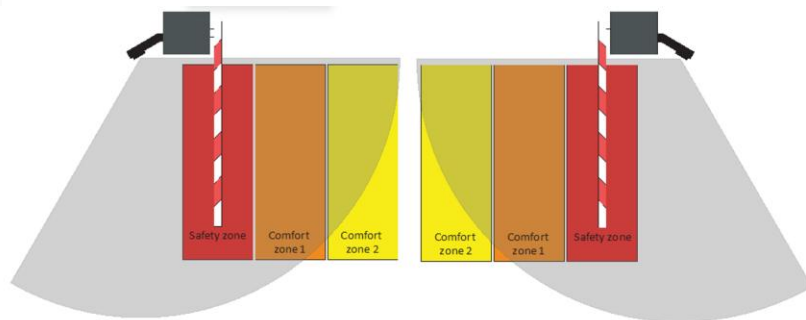
Web Interface through Wi-Fi HotSpot – Any Wi-Fi enabled device

- Traffic barrier (Example)
- Safety zone width = Size in cm
- Safety zone length = Size in cm
- Barrier arm length = Size in cm
- Virtual loop 1 = Size & gap in cm
- Virtual loop 2 = Size & gap in cm
- Skirt size, length & gap's = in cm/mm
- Once all details input, run calibration (5 sec's)
- Setup complete !



LISENS scan – Installation

Adaptable to many scenarios !
Single & (*) Multiple Sensors–
Skirts + Pendulum Supports



* - Multiple sensor version coming Q4 2025 – EN12453 Type E

LISENS scan – Real world example



Dual 3-meter barriers with skirts – IN/OUT

LISENS *scan* – Real world example



9-meter barrier with skirt – 1 controller, 1 sensor

LISENS scan – Product ordering & availability

Information LISENS scan (Comfort-Version) - **BARRIERS**

Article no.	Description
2302-0300	LISENS scan CA-B-Set 1, 1 sensor, bracket & control unit (EN12453 Type D) – FULL Boxed Kit
2302-0310	LISENS scan SUC1-1240E, sensor inc. bracket (Type D) (Spares)
2302-0320	LISENS scan CUC2-2BA, control unit "confort version" (Spares)

Information LISENS scan (Safety-Version) - **BARRIERS**

Article no.	Description
2302-0350	LISENS scan CC1-B-Set 1, 1 sensor, bracket & control unit (EN12453 Type E) – FULL Boxed Kit
2302-0330	LISENS scan SUC2-1240E, sensor inc. bracket (Type E)
2302-0340	LISENS scan CUC2-2BC1, control unit "safety version"

Planned availability:

Comfort version – Available NOW !

Safety version – Estimated Q4 2025

Sliding Gates & Doors – Estimated Q2 2026