DATA SHEET

KY-LOC 1D.01.01

moving or fixed

measured distance

transmitted data

moving or fixed
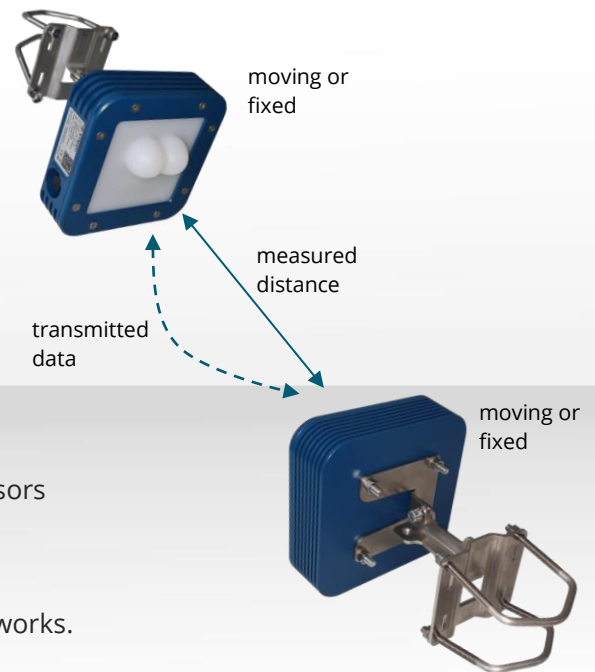
- Precise and reliable distance measurement between two Radar sensors to activate warning thresholds and measure distances.
- Maintenance-free indoor and outdoor operation.
- RF based, no interference with WiFi and mobile communication networks.

COLLISION AVOIDANCE ASSISTANCE SENSOR

TECHNICAL DATA: KY-LOC 1D.01.01

Anti-collision detection range[1];	2m ≤ x ≤ 500 m
Distance measurement range	2m ≤ x ≤ 40 m
Repeat accuracy of measurement[1]	typ. ± 15 mm
Absolute distance accuracy[1]	typ. ± 50 mm
Opening Angle horizontal/vertical	± 7°
Update rate	up to 20 Hz (single side data connection)
User data transfer parallel to measurement	up to 1 kbit/s
Protection	IP 66, IP66k and IP68 (cntd. plugs, 24h@1m)
Operating temperature	-30 ... +75 °C; -22 ... 167 F
Weight, dimensions LxWxD	1060 g; 138x138x43mm (without support bracket)
Voltage, power consumption (M12, 5 pin, male, A-coded)	9 ... 36 V DC or PoE (802.3af), 5 W
Frequency band	61 GHz (ISM band)
Interface (M12, 8 pin, female, X-coded)	Ethernet (100Base-Tx), PoE (802.3af), RS485
Radio compliance	FCC, IC

1) Values may vary with radio regulations applicable

KY-LOC 1D.01.01 - Quick Facts

- Cost effective collision warning devices for any type of moving equipment (e.g., cranes, transfer cars).
- To be used as assistance system, not as single safety device if personal injuries could be possible.
- No precise horizontal or vertical alignment required.
- Parallel wireless user data trans-mission without the use of WiFi.
- Highly reliable under adverse weather conditions, dust, and dirt.
- User-defined preset distance warnings.
- No interference with WiFI or 5G.
- Multiple KY-LOC pairs can operate in parallel using different channel settings.
- Easy to install, mounting bracket included.
- Maintenance-free.

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DATA SHEET
KY-LOC 1D.01.01
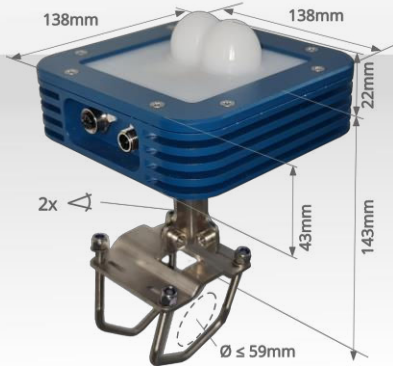
- Separate power supply or PoE
- All interfacing options (see below)

Mechanical Interface

138mm × 138mm
22mm
2x
43mm
143mm
Ø ≤ 59mm

Electrical Interface

- Data interface: Ethernet
- Power: separate power supply or PoE

- Output signal module KY-XTRA B.10.01 with digital output signals based on defined distance warning thresholds

APPLICATION EXAMPLES

Speed dependent dynamic warning zones:
A: *slow*
B: *stop*

Radar signal

KY-LOC 1D Sensor

High Speed
⇨ Large dynamic warning zones
⇨ Early warning

Low Speed
⇨ Short dynamic warning zones
⇨ Close approach possible
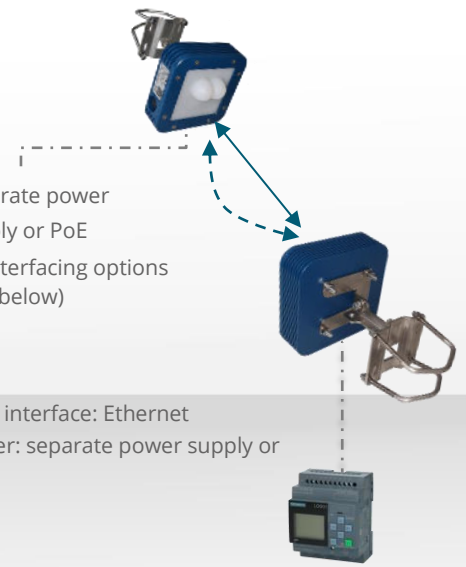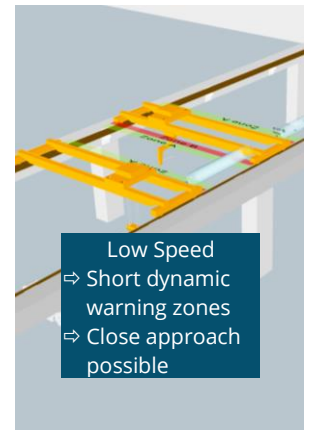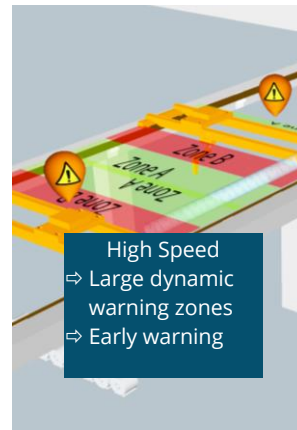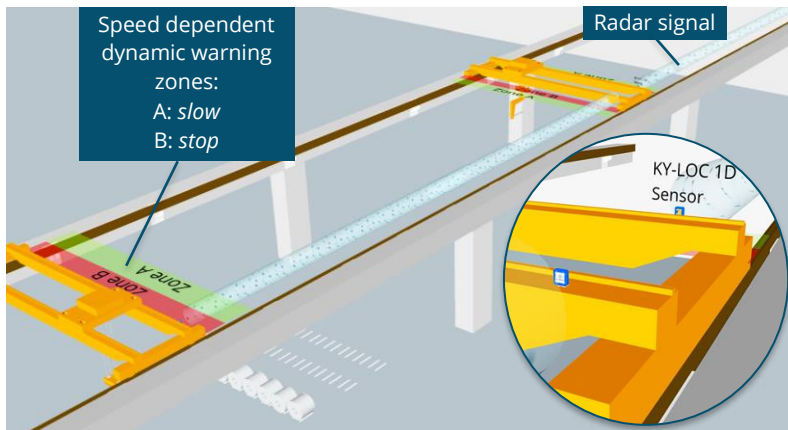
CRANES
- Collision avoidance
- No-go zones
- X-Y-Z axis motion control

FREE RANGING OBJECTS
- Rubber tyre gantries
- Not depending on straight alignment of relative mounting positions

MACHINE ZONE CONTROL
- Any moving machine
- Control zone entry/exit
- Multiple machines/zones

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