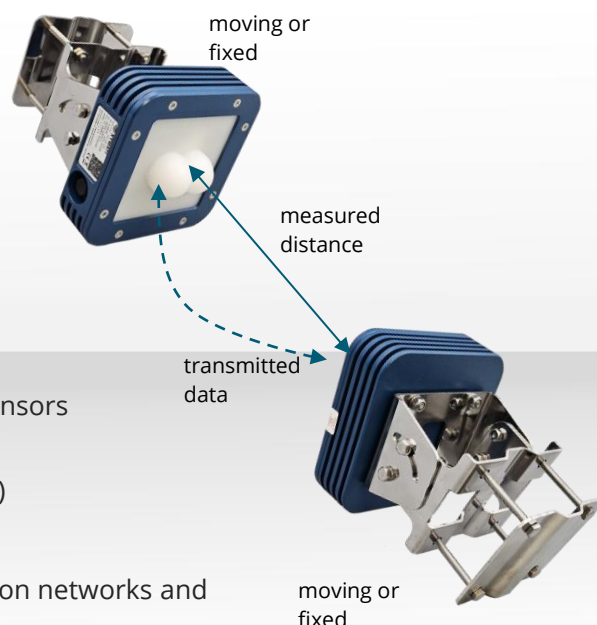


DATA SHEET

KY-LOC 1D.01.01

- Precise and reliable distance measurement between two radar sensors activate collision warning thresholds and measure distances.
- PL/SIL level certification possible (as a system with 2 parallel pairs)
- Maintenance-free indoor and outdoor operation.
- RF based solution, no interference with WiFi, mobile communication networks and electric arc furnaces.



ANTI-COLLISION & POSITIONING SENSOR

TECHNICAL DATA: KY-LOC 1D.01.01

Anti-collision detection range	$0,5\text{m} \leq x \leq 40\text{ m}$
Distance measurement range	$0,5\text{ m} \leq x \leq 40\text{ m}$
Maximum operating range ¹⁾	$0,5\text{ m} \leq x \leq 500\text{ m}$
Repeat accuracy of measurement ²⁾	typ. $\pm 15\text{ mm}$
Absolute distance accuracy ²⁾	typ. $\pm 50\text{ mm}$
Opening Angle horizontal/vertical	$\pm 7^\circ$
Update rate	up to 30 Hz
User data transfer parallel to measurement	up to 1 kbit/s
Protection	IP66, IP66k and IP68 (cntd. plugs, 24h@1m)
Operating temperature	$-30 \dots +75\text{ }^\circ\text{C}$; $-22 \dots 167\text{ }^\circ\text{F}$
Weight, dimensions LxWxD	1060 g; 138x138x43mm (without support bracket)
Voltage, power consumption (M12, 5 pin, male, A-coded)	12 ... 24 V DC or PoE (802.3af), 5 W
Frequency band	60-64 GHz
Interface (M12, 8 pin, female, X-coded)	Ethernet (100Base-Tx), PoE (802.3af)
Radio compliance	ETSI, FCC, IC

1) Values may vary with radio regulations applicable

2) Environmental conditions may affect the signal path

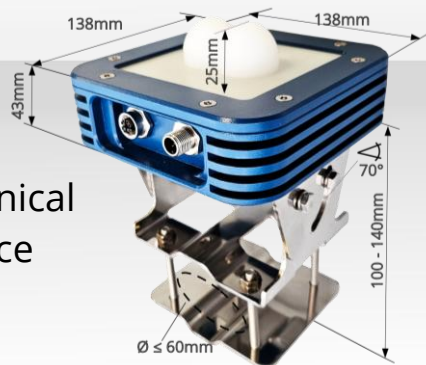
KY-LOC 1D.01.01- Quick Facts

- Ideal for short distance measurement for crane trolley.
- Cost effective collision warning devices for any type of moving equipment (e.g. cranes, transfer cars).
- Dynamic anti-collision based on approach speed.
- Parallel wireless user data transmission 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 integration with PLC devices
- Easy to install, adjustable mounting bracket, cables and connectors available.
- Maintenance-free.

DATA SHEET

KY-LOC 1D.01.01

Mechanical Interface

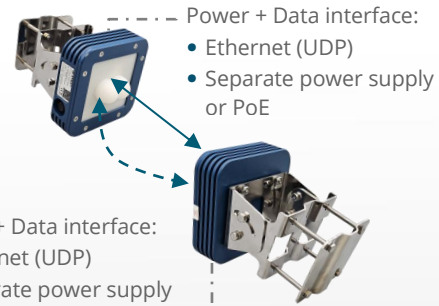


Output Interface

- Interface converter KY-XTRA B.06.01 enabling: Profinet, Ethernet IP
- Interface converter KY-XTRA B.06.01 + KY-XTRA B.05.01 enabling: Profibus
- Output signal module example: KY-XTRA B.10.01 with industrial output signals (dry contacts) based on defined distance warning thresholds

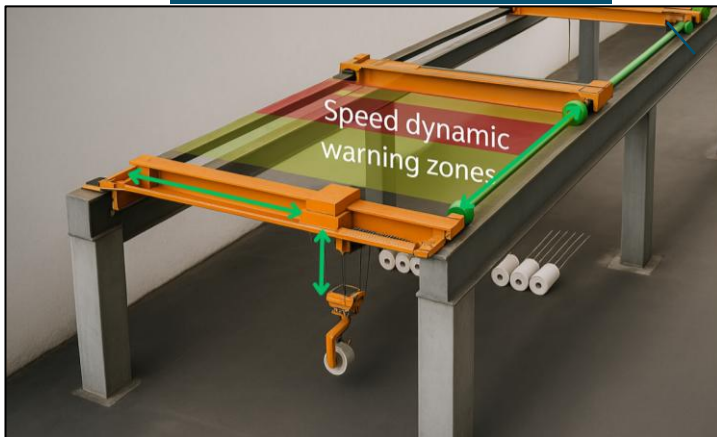
Power + Data interface:

- Ethernet (UDP)
- Separate power supply or PoE

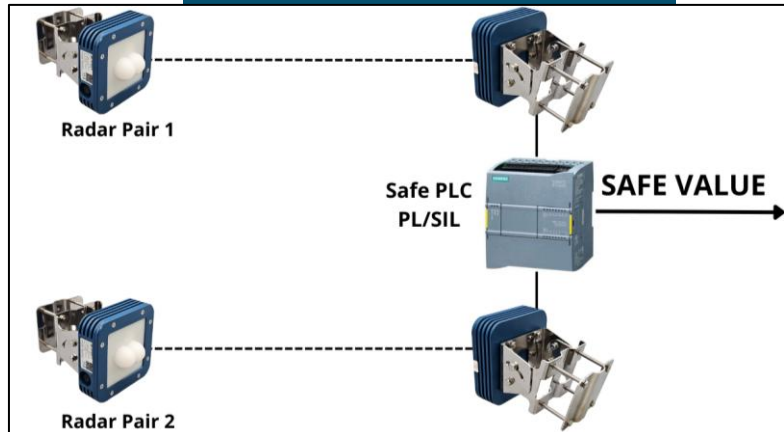


APPLICATION EXAMPLES

X-Y-Z AXIS MOTION CONTROL



INTEGRATION WITH SAFETY PLC



CRANES

- Collision avoidance
- No-go zones
- Inventory tracking

RAIL BOUND EQUIPMENT

- Stacker Reclaimer
- Gantry Cranes
- Ladle transfer cars

MACHINE ZONE CONTROL

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

