

LASER COLLISION AVOIDANCE SYSTEM (LCAS)



YOUR OVERHEAD EQUIPMENT IS TOO VALUABLE TO TAKE CHANCES

HIGHLIGHTS

- LCAS protects cranes and hoists from contact with other equipment or end walls.
- Using Retroflective Class-1 laser technology, the LCAS's simple push-button setup permits you to program your system to activate the Alarm and Stop output functions at exactly the distance you require.
- With a range of 50 meters (164 feet), the LCAS can discriminate distance changes to a resolution of 3mm (0.12 inches)
- LCAS protects stationary equipment too. Its warning alarm output will be activated if the unit detects a target moving within its set warning distance.
- Allows operators time to take corrective action before a costly collision occurs.

FEATURES

- Retroflective Class-1 laser
- Range: 0.3 m to 50 m (1 foot to 164 feet)
- Field selectable alarm and stop output settings
- Internal bypass switch to override stop function
- LED status lights
- Standard NEMA 4X (IP66) enclosure
- Suitable for dry indoor use only
- Continuous circuit fault monitoring
- Optional internal heater for low temperature applications
- Supply voltage: 100 - 240 VAC @ 3A
- Solid state control outputs rated at 90-140 VAC @ 3 amps MAX
- Dimensions (H x W x L): 286 x 235 x 178 mm (11.25 x 9.25 x 7 inches)





TECHNICAL DATA AND SPECIFICATIONS

LASER TRANSDUCER		LCAS UNIT	
Sensing Range	0.3 m to 50 m using supplied target (1 foot to 164 feet)	Weight	9.5 lb (4.3 kg)
Sensing Beam	Typical Beam Diameter: 6 mm at 3 m	Dust and Vapor Shield	1.5 lb (0.68 kg)
Typical Laser Lifetime	75,000 hr	Power Consumption	3 W
Retroreflective Mode	658 nm visible red IEC and CDRH Class 1 laser, 0.15 mW max radiant power	Enclosure	NEMA 4 (IP66) Gray Fiberglass Reinforced Polyester, Standard
Output Response	100 ms On and Off	Dimensions	286 mm x 235 mm x 178 mm (11¼" H x 9¼" W x 7"D)
Temperature Drift	< 3 mm/°C	Number of Outputs	Two, one for Direction Output and one for Alarm Output
Operating Conditions	Temperature: 0°C to +50°C (32°F to +122°F); Max RH (relative humidity) 90% at 50°C, non-condensing	Number of Inputs	One, for Direction Input, allows restricted movement away from target

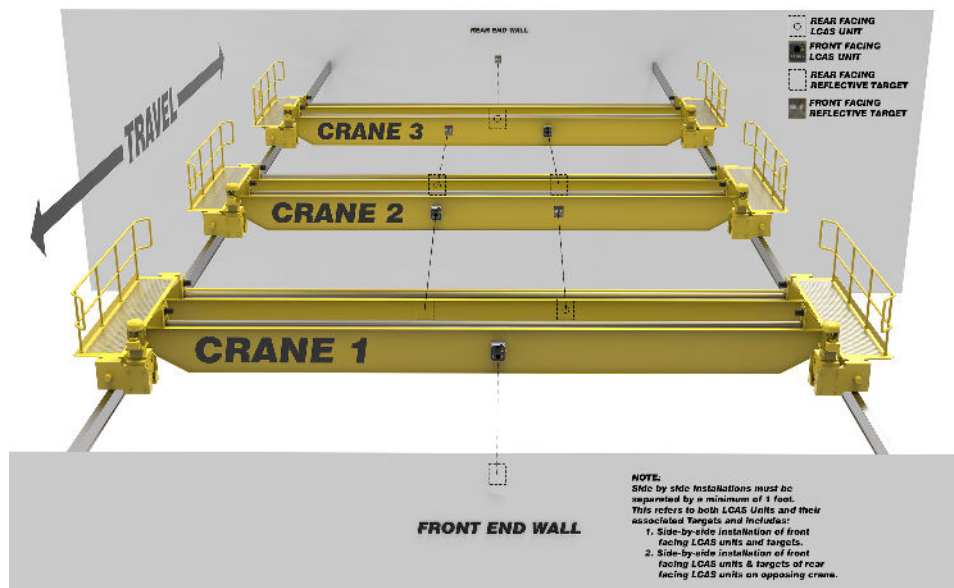


Figure 1: Typical LCAS Unit Configurations for Multiple Overhead Crane Application