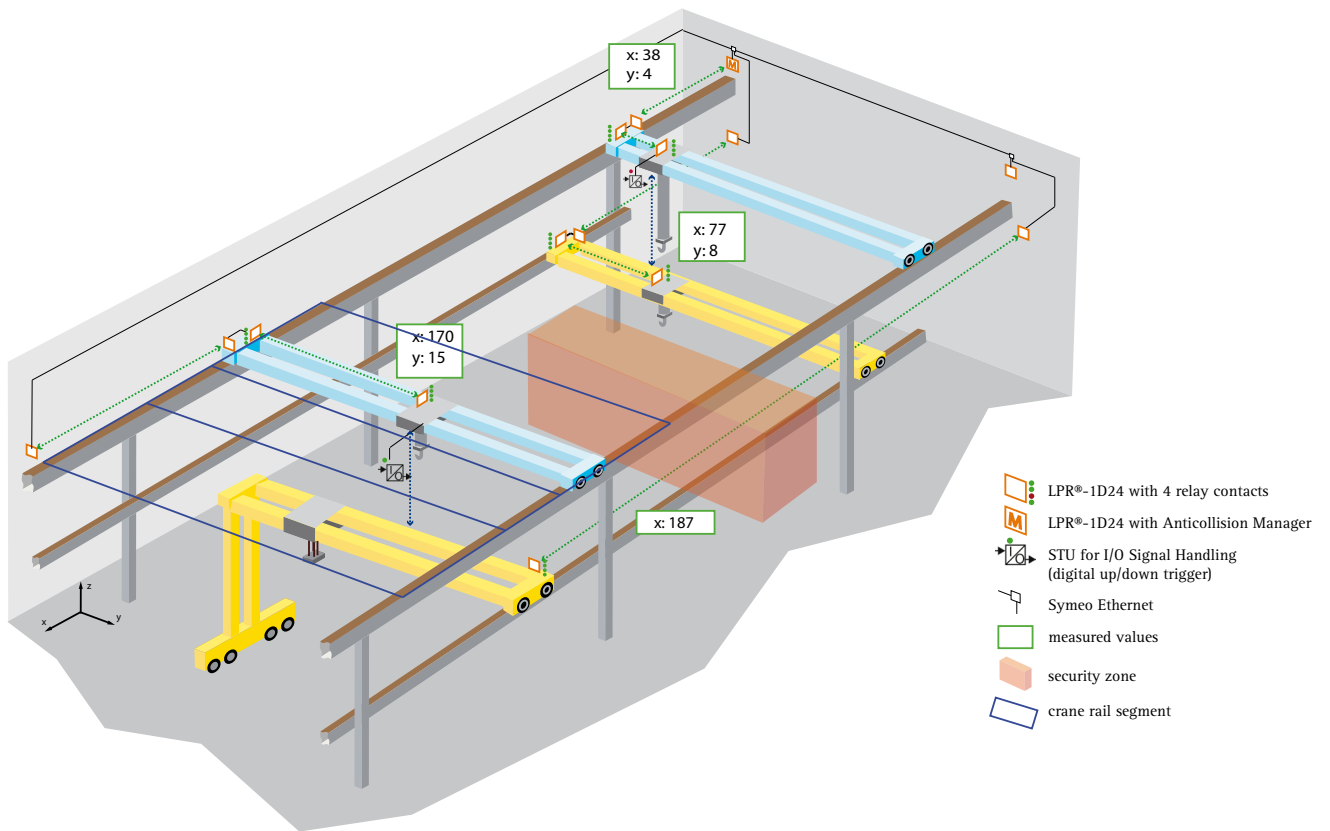


Embedded Software Crane-AntiColl



Data Sheet



Embedded Software Crane-AntiColl Collision Avoidance of Cranes

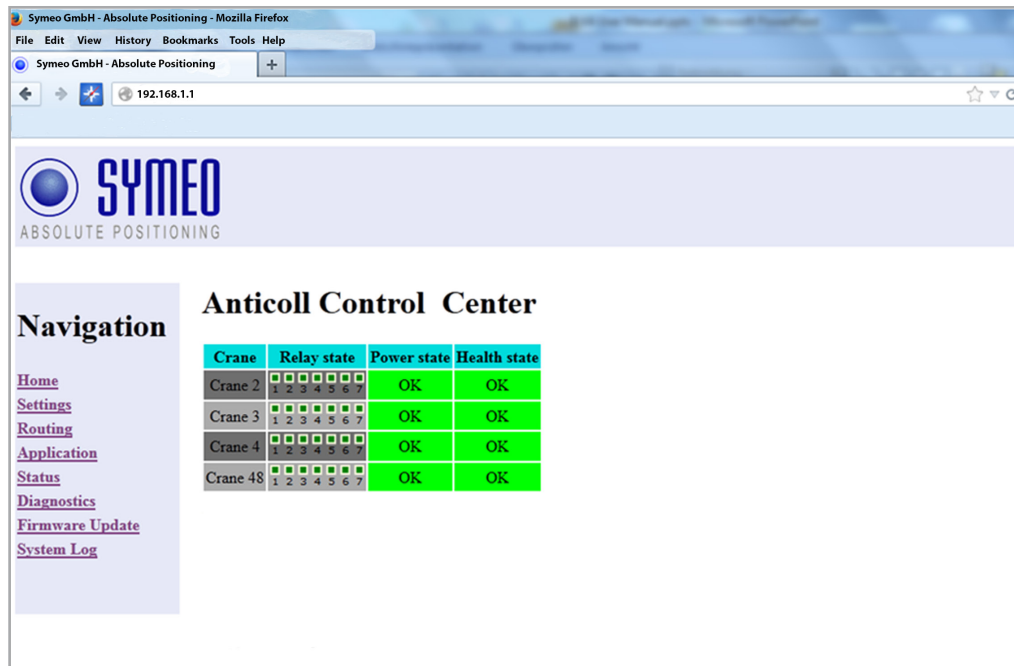
- Reliable collision avoidance
- Flexible configuration for typical crane applications
- WiFi-independent
- No central control unit required
- Crane-to-crane communication

The Crane-AntiColl software from Symeo is a modular assistance system developed especially for preventing collisions between cranes and objects within the cranes operation zone.

The software makes it easy to configure triggers for warning and stop signals. The system is capable of tracking cranes with various dimensions, even at different heights. As a standard, up to 3 cranes at the upper level and up to 3 cranes at the lower level can be configured. Cranes can also be prevented from crossing over pre-defined safety zones. All crane movements are monitored in 3D and in real-time. Crane hook signals of cranes at the upper level can be detected by using the Symeo Telemetry Unit STU.

The positions and speeds of the cranes and trolleys are measured with the highly-reliable LPR®-1D24 sensor. Dynamical distance measurement values are displayed in the software interface. This data is transmitted via the integrated LPR® wireless data link or via the separate Symeo Ethernet. Symeo's Crane-AntiColl software monitors and compares the position of all participating objects in real-time and detects potential collision situations. If the distance between objects falls below pre-defined thresholds, a signal is sent to the Symeo unit on the affected crane, which opens the respective (isolated) relay contacts.

As an option, the measurement data can be visualized and logged by a central Symeo server. The Symeo collision warning system does not require or disturb a WiFi connection.



The Symeo Anticollision Manager on one of the Symeo units allows the startup configuration in any browser.

- Up to 6 cranes (three at the upper level, three at the lower level) can be parameterized in the standard solution.
- Up to 10 security zones on the floor as well as up to 40 separate crane rail segments can be defined by their coordinates in order to restrict crossings or transfer areas of the cranes.

Individual cranes, which are out of electricity because of operating service, can be temporarily deactivated in the Anticollision Manager in order to maintain the overall functionality.

Technical Data: Embedded Software Crane–AntiColl

Number of cranes and trolleys	as a standard up to 3 at the upper level and up to 3 at the lower level
Number of virtual security zones	up to 10
Number of cranes and trolleys	up to 40
Number of relays addressed per LPR® unit	4
Monitoring of crane hook position	optional, if height sensor signal is available
Dimension of warning/stopping distances	freely configurable
Real-time operation	yes
Data transmission	via LPR® radio channel or Symeo Ethernet
Parameterization	no programming skills necessary
System operation monitoring (communication and position)	Symeo AntiColl continuously checks data integrity
Position detection	LPR®-1D24