SX5-B

Safety Scanner System

• Maximum ranges for Safety Zone is 5.5 m and Warning Zone is 40 m

• 275 degrees of coverage makes it easy to safeguard a corner

• Dynamic Muting available and selectable detection capability for vertical applications

• Configurable for up to 6 zone sets

• Light Immune and dust resistant

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Dependable and Flexible Industrial Safeguarding

Horizontal or vertical monitoring of both personnel and stationary or mobile systems

Rugged design for reliable industrial use

27 different status, diagnostic, warning and error displays

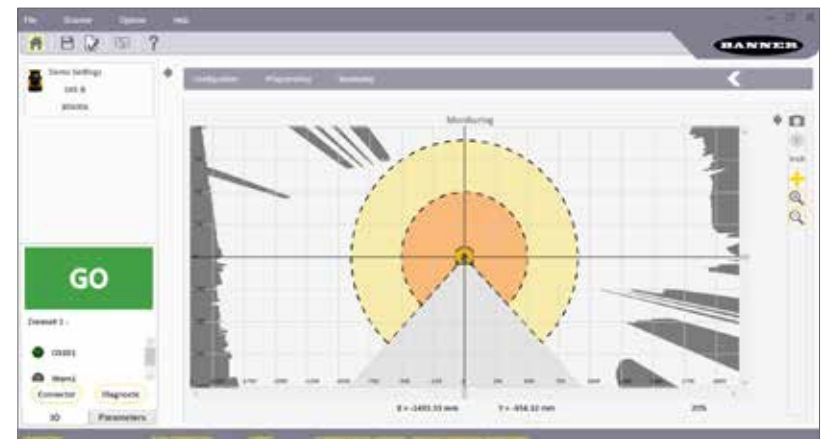| GO | STOP | WARNING | Restart | MUTING | CLEANW1 |

Keypad

M12 Ethernet connector cover

LED 1: Object Detection in Safety Zone (OSSD)
LED 2: Not Available
LED 3: Assigned to Warning Zone 2
LED 4: Assigned to Warning Zone 1
LED 5: Interlock Status (waiting for Reset)

Software

Communication between a PC and the SX5 via an Ethernet network. The SX5 is preprogrammed at the factory with a default configuration but must be reconfigured for each application.

• Administrative data: example file name, application description etc.
• Safety-relevant data: startup process information
• Safety Zone or Warning Zone configuration data: contours and limits

Safeguarding a Robotic Weld Cell

Challenges

• Safeguard weld cell access on two sides

• Maintain a steady flow of material through the weld cell

• Alert personnel as they approach hazardous areas

• Prevent nuisance trips caused by dust, dirt, or light flash

Solution:

• A single SX5 safety laser scanner continuously scans a 275 degree area to detect staff or equipment entering protected zones

• Software interface makes it easy to create custom safety and warning zones to safeguard large, complex, and irregularly shaped areas

• An alert is triggered if an object enters the warning zone and equipment will come to a stop if the safety zone is breached

• Best-in-class immunity to dust, dirt, and light flash minimizes nuisance trips caused by environmental conditions
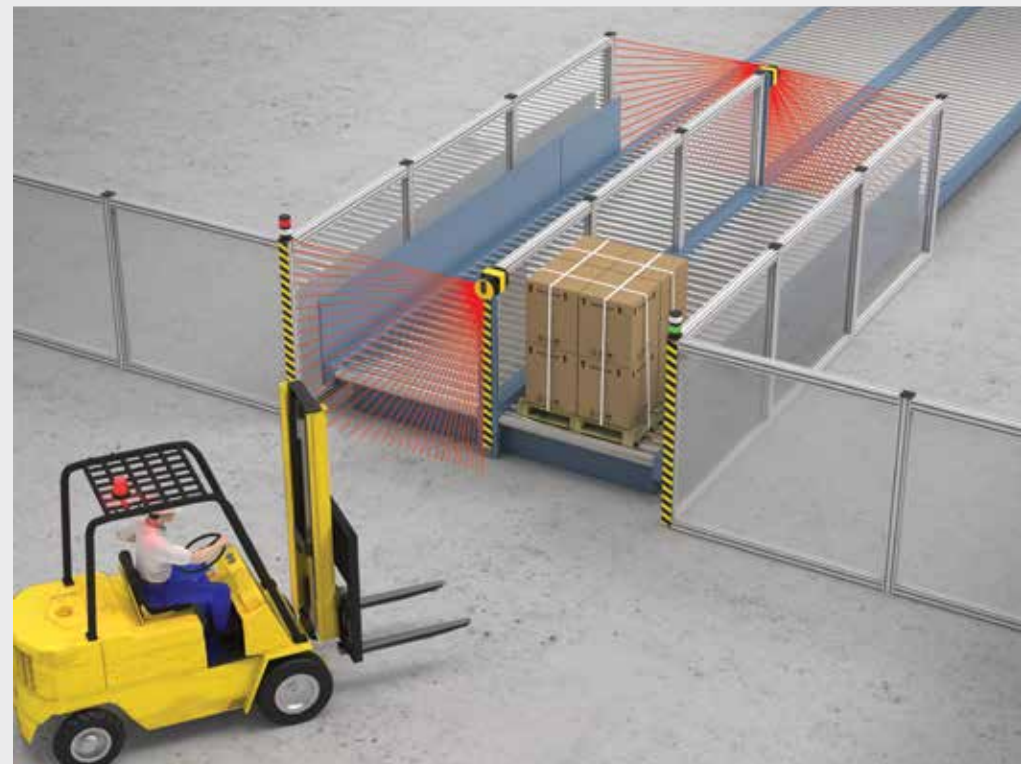
Safeguarding a Pallet Transfer Conveyor

Challenges

• Protect multiple access points on pallet transfer conveyor

• Provide easy access to forklifts loading and unloading pallets

• Minimize time and expense necessary to implement safety solution

• Limit potential for damage caused by impact with pallets or forklifts

Solution:

• Safety Zone Switchover capability enables each SX5 to create two independent safety zones to safeguard both access points at either end of the pallet transfer conveyor

• Muting sensors can be directly connected to the SX5 to enable forklifts to access the pallets without the expense and hassle of adding an external module or controller

• Compact, one-piece safety device installs easily above and away from area hazards without requiring time-consuming alterations to area infrastructure

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Specifications

152 mm

102 mm

112 mm

Operating Range and Scanning Angle	Safety protective field: up to 5.5 m Warning field: 40 m Scanning angle: 275 degrees
Detection Capability	40 mm, 70 mm
OSSD (Safety Output)	All inputs and outputs are protected from short circuits to +24 V dc or dc common
Environmental Rating	IEC IP65
Operating Conditions	0 °C to +50 °C (+32 °F to +122 °F) 95% maximum relative humidity (non-condensing)
Current Consumption (24 V dc)	No output load: 0.3 A at 24 V dc With maximum output load: 1.1 A at 24 V dc

Mechanical Data	Housing material: Aluminum Alloy Housing color: YellowRAL1003 Optics cover material: PC Optics cover surface: Acrylic
Safety Data	Type 3 (EN 61496-1) SIL 2 (IEC 61508) Category 3 (EN ISO 13849-1) SILCL 2 (EN 62061) PL d (EN ISO 13849-1)
Optical Data	Wavelength: 905 nm Pulse duration: 3 nsec Laser class: CLASS 1 (EN 60825-1)
Certifications	CE c(UL)us LISTED

Interface Options

Safety Controllers

XS26-2
XS26-2d
XS26-2e
XS26-2de

Expandable safety controller supports up to eight I/O modules and programs easily using icon-based software

SC26-2
SC26-2d
SC26-2e
SC26-2de

Flexible, efficient safety controller has small footprint and programs easily using icon-based software

Safety Modules

UM-FA-9A

UM-FA-11A

Monitors solid-state PNP OSSD safety outputs and provides latching (manual reset) function for applications requiring a reset

Accessories

SXA-MBK-1
Pitch and roll angle adjustment bracket

SXA-MBK-2
Protection bracket

8-Pin M12 Euro-Style
Straight connector

SXA-815D
4.5 m (15')
SXA-825D
7.6 m (25')
SXA-850D
15.2 m (50')
SXA-8100D
30.4 m (100')

4-Pin M12 D-Code to RJ45
Double ended

STP-M12D-406
1.83 m (6')
STP-M12D-415
4.5 m (15')
STP-M12D-430
9.14 m (30')

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