

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 mount on a corner
- Dynamic Muting available and selectable detection capability for vertical applications
- Configurable for up to 6 zone sets
- Light Immune and dust resistant



Dependable and Flexible Industrial Safeguarding

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



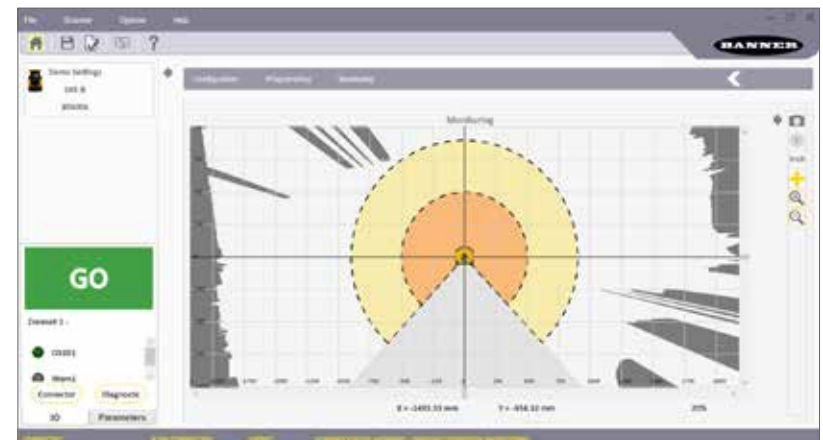
- LED 1: Object Detection in Safety Zone (OSSD)
- LED 2: Not Available
- LED 3: Assigned to Warning Zone 2
- LED 4: Assigned to Warning Zone 1
- LED 5: Interlock Status (waiting for Reset)



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° 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



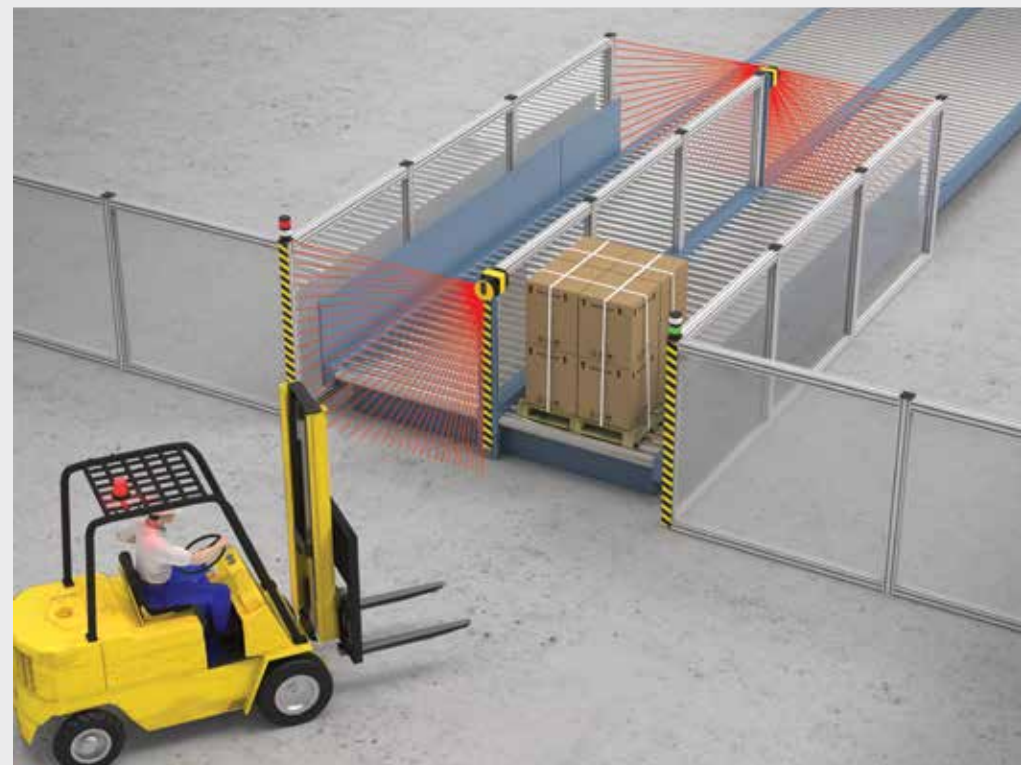
Safeguarding a Pallet Transfer Conveyor

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



Specifications



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



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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1-888-373-6767

www.bannerengineering.com

