

442L Safezone Multizone

Enhanced SafeZone™ Multizone Safety Laser Scanner Protects Personnel and Equipment While Offering Enhanced Flexibility

When it comes to machine safety, Rockwell Automation® knows that protection of personnel and equipment is your main concern. At the same time, flexibility and productivity are points that must also be considered as you design your safety system. Optimize all of these with the Allen-Bradley® Guardmaster® SafeZone™ Multizone safety scanner. Featuring the latest generation of laser technology, SafeZone Multizone is a versatile, cost-effective and rugged solution that is ideally suited for a wide range of industrial safety applications up to Category 3.

The SafeZone Multizone is a Type 3 optoelectronic device that protects personnel or equipment by detecting objects or persons in its sensing field. Operating on the 'time of flight' principle, the SafeZone Multizone emits pulses of eye-safe infrared laser light over a 190-degree arc, then receives and processes light reflected off of intrusions in the sensing field to determine the position and distance to the object. When an object is detected, the SafeZone Multizone's outputs switch off causing the hazardous motion to cease.

A Flexible, Easy-to-Use Machine Guarding Solution

In addition to increased safety, you also get enhanced flexibility thanks to the SafeZone Multizone's four configurable detection fields, each with warning and safety zones that can be customized within the maximum scanning range to suit your application. Configuration of these zones is quick and easy through the use of the Windows®-based SCD software supplied with each SafeZone Multizone. The 'safety field' is configurable for a 5 meter range over 190°, while the 'warning field' can be set for up to a 49 meter range (dependent upon the object's reflectivity). Plus, SafeZone Multizone is certified for both vertical and horizontal guarding applications and offers configurable resolutions from 30 mm to 150 mm, giving you a wide range of detection options for both stationary and mobile installations. That means SafeZone Multizone addresses point of operation, area guarding or access detection applications on your plant floor.



SafeZone Multizone also reduces downtime by simplifying maintenance and troubleshooting. The dual-function Application Diagnostic Output (ADO) can be used for OSSD status and/or a weak signal output, which indicates a dirty front window. The front window of the scanner is also field replaceable should it become damaged or scratched. For further ease of troubleshooting, the SafeZone Multizone also features a 7-segment display along with several LEDs for quick and easy diagnosis of the device's operational status or fault condition.

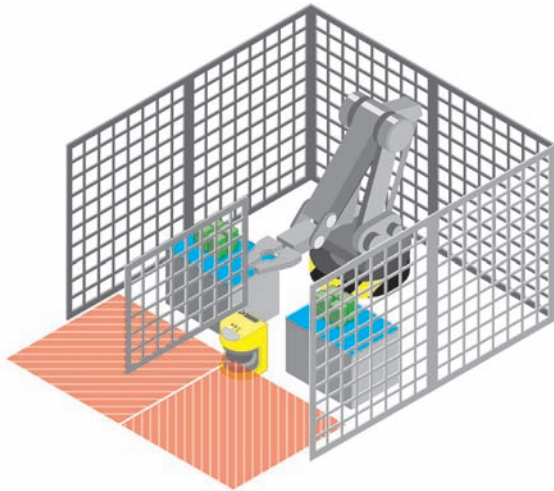
Applications

The combination of enhanced performance with simple installation and setup makes the SafeZone Multizone laser scanner the ideal solution for robotic and assembly cells. The SafeZone Multizone can be used in stationary applications for horizontal detection in a defined protection zone, in vertical applications for whole body access detection, and on mobile safeguarding applications, particularly on AGVs (Automated Guided Vehicles).

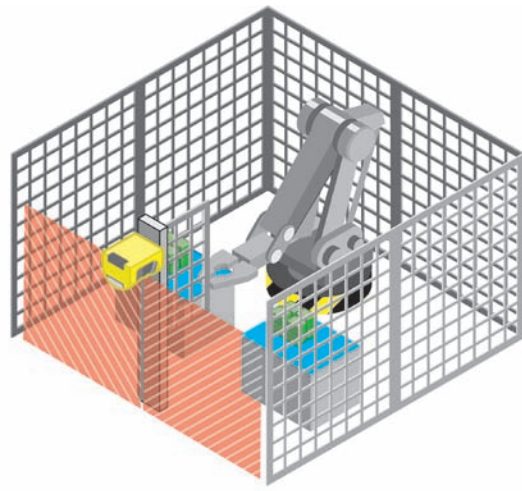
For increased application flexibility, it is possible to configure the number of times (two to sixteen) that the SafeZone Multizone processes signals from an object in the sensing field before it sends a stop signal to the machine. This configurable sampling allows things such as weld slag, insects, and smoke to pass through the sensing field without causing a shutdown of the equipment or machinery. Combine this feature with the rugged, IP65 housing, and SafeZone Multizone is ideal for your harsh industrial applications.

LISTEN.
THINK.
SOLVE.®

Application Examples



Horizontal Mounting Two Protective fields



Access Guarding Vertical Mounting Two Protective Fields

Product Selection and Specifications

A SafeZone Multizone laser scanner system is comprised of two components: the scanner head with I/O module (442LSFZNMZ) and a 10 meter prewired system connector (442L-CSFZNMZ-10). In addition, the prewired system connector is available in a 20 meter version. An RS 232 configuration cable (442L-ACRS232) is also required for programming the SafeZone Multizone via the SCD software. The RS 232 cable is offered in a 2 meter or 10 meter length.

Catalog Number	Product Description
442L-SFZNMZ B	SafeZone Multizone laser scanner
442L-CSFZNMZ-10	Prewired memory module with 10 meter cable
442L-CSFZNMZ-20	Prewired memory module 20 meter cable
442L-ACRS232	RS 232 configuration cable - 2 meters



Accessories

Mounting kit 1 (442L-AMBSFZNMZ1) can be used as a standalone mounting fixture. Mounting kits 2 and 3 (442LAMBSFZNMZ2 and 442L-AMBSFZNMZ3, respectively) can be employed for increased mounting adjustability. However, use of Mounting kit 2 requires mounting kit 1; similarly, Mounting kit 3 must be used in conjunction with Mountina kits 1 and 2.



Mounting Kit 1

Mounting Kit 2

Mounting Kit 3

Catalog Number	Product Description
442L-AMBSFZNMZ1	Mounting Bracket 1
442L-AMBSFZNMZ2	Mounting Bracket 2
442L-AMBSFZNMZ3	Mounting Bracket 3
442L-SFZNMZW	Replacement Front window
442L-ACRS232-8	RS 232 configuration cable - 10 meters

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