



Your future's safe!



SAFEGATE

access control safety light curtains



NORSTAT INC.

short form

Flexible configuration
Hardware or Software configuration
to cover all Muting applications

Pre-configured Muting logics
Exit-only (parallel/crossed), Entry-Exit (parallel),
Entry-Exit (crossed)

Integrated Status and Muting lamp

Fully scalable
Change configuration at any time

**Pre-configured and pre-wired
Muting arms and Muting brackets**

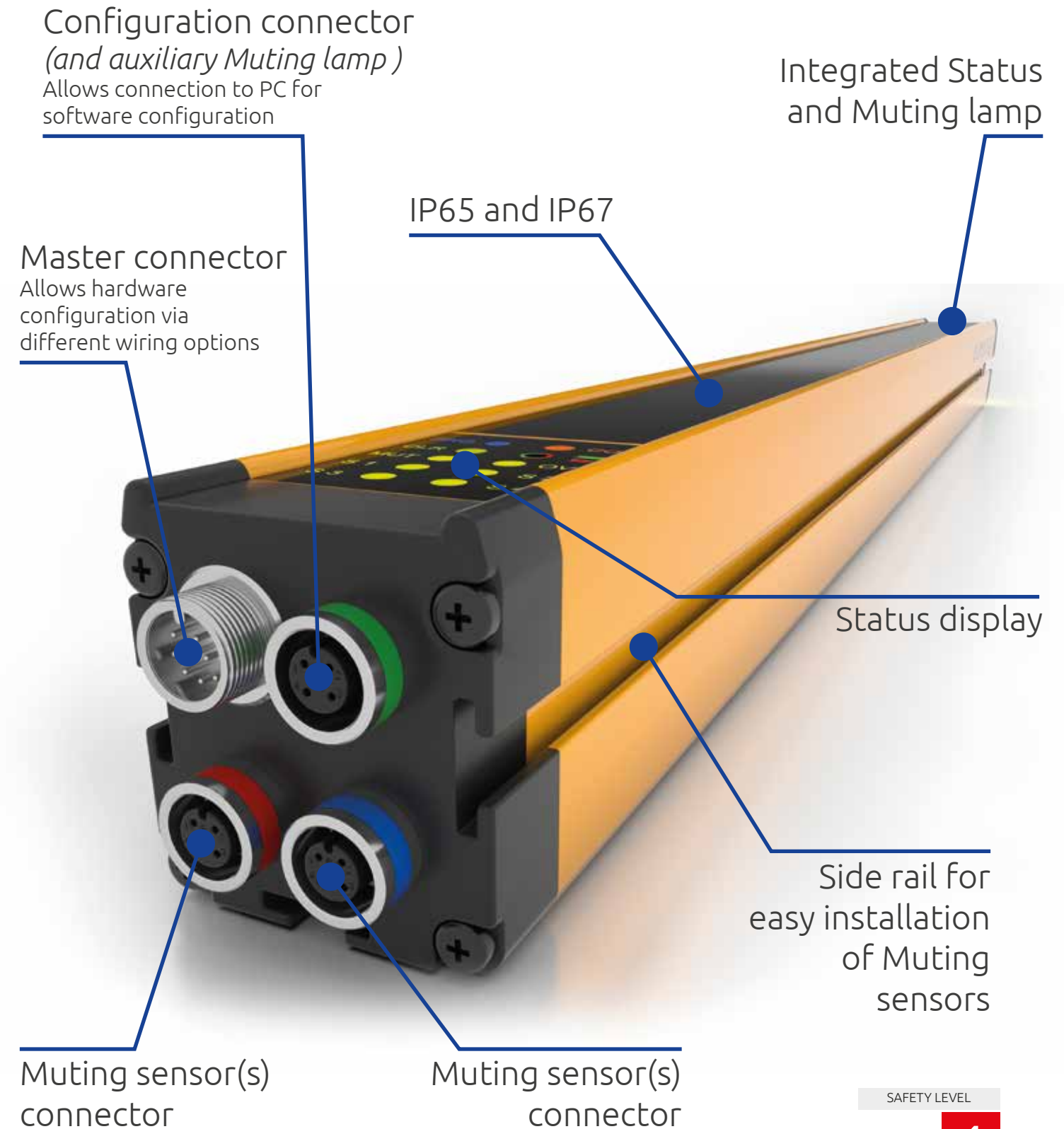
New M5 multi-beam Muting photocell
Ideal for sensing unconventional objects

Transceiver versions available
With passive retro-reflective elements



Vast range of accessories
Including special mounting brackets, floor mounting columns
and connection boxes

**access control barriers with
integrated Muting functions**



A unique range

Covering all Muting applications

1 Choose the barrier model



SM

Hardware configuration



SMO

Hardware configuration
With integrated Status and Muting lamp



SMPO

Hardware or Software configuration
With integrated Status and Muting lamp

Also available as **TRX** TRANSCIVER with passive retro-reflective elements

2 Configure the Muting logic

Hardware configuration
via Master connector wiring

L2XP configurations
"Exit-only"
2 crossed or
parallel beams

T2X configurations
"Entry-Exit"
2 crossed beams

T4P configurations
"Entry-Exit"
4 parallel beams



● ● SM, SMO and SMPO models

Software configuration
via Safegate Configurator Software



L2X L2P
T2X T4P
configurations

SCS

● SMPO models

3 Choose the Muting sensors

One-way / Exit-only

Two-way / Entry-Exit

MA Muting
arms with
integrated
sensors



Crossed beams
One-way
Exit-only

MA L2X
2 integrated sensors
(Emitter-Receiver)



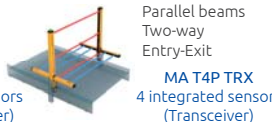
Parallel beams
One-way
Exit-only

MA L2P TRX
2 integrated sensors
(Transceiver)



Crossed beams
Two-way
Entry-Exit

MA T2X
2 integrated sensors
(Emitter-Receiver)

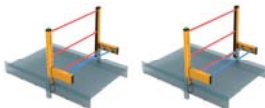


Parallel beams
Two-way
Entry-Exit

MA T4P TRX
4 integrated sensors
(Transceiver)



MZ Muting
brackets with
M⁵ or M^{TRX}
sensors



Crossed or Parallel beams
One-way
Exit-only

MZ L2XP / TRX
2 M⁵ multi-beam sensors
(or 2 M^{TRX} for TRX versions)



Crossed beams
Two-way
Entry-Exit

MZ T2X / TRX
2 M⁵ multi-beam sensors
(or 2 M^{TRX} for TRX versions)

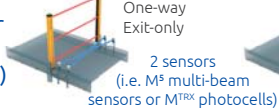


Parallel beams
Two-way
Entry-Exit

MZ T4P / TRX
4 M⁵ multi-beam sensors
(or 4 M^{TRX} for TRX versions)

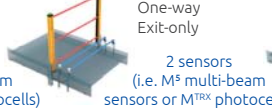


External M⁵ or
M^{TRX} sensors
(or photocells)



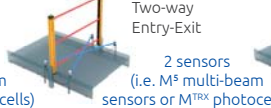
Crossed beams
One-way
Exit-only

2 sensors
(i.e. M⁵ multi-beam
sensors or M^{TRX} photocells)



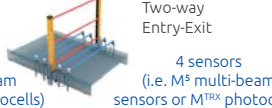
Parallel beams
One-way
Exit-only

2 sensors
(i.e. M⁵ multi-beam
sensors or M^{TRX} photocells)



Crossed beams
Two-way
Entry-Exit

2 sensors
(i.e. M⁵ multi-beam
sensors or M^{TRX} photocells)



Parallel beams
Two-way
Entry-Exit

4 sensors
(i.e. M⁵ multi-beam
sensors or M^{TRX} photocells)



access control barriers with integra

An integrated solution

One single barrier for all your access control needs

SAFEGATE

The most flexible Muting integrated barrier on the market today

Each barrier can be configured as Exit-only (L-Muting) or Entry-Exit (T-Muting) with crossed (X) or parallel (P) beams.

Configuration can be changed at any time.

Hardware configurable models (SM/SMO/SMPO) allow configuration of Muting logics and functional parameters via the Master connector wiring.

Software configurable models (SMPO) allow configuration of Muting logics and additional functional parameters (i.e. Partial Muting) via Safegate Configuration Software (SCS).

Programmable models (SMPO) allow further configuration parameters, ideal to address particular issues in more complicated application scenarios.

Safegate can be used with MA Muting arms (with pre-aligned and pre-configured integrated Muting sensors), with MZ Muting brackets (with M⁵ multi-beam sensors or M^{TRX} photocells) or with any other Muting sensor.

Sensors can be upgraded, added or removed at any time.

Models with integrated status lamp allow to easily recognise the status of the barrier.

Access control barrier with integrated Muting functions

The new Safegate Type 4 range of access control barriers is the ideal solution for the protection of a vast number of high-risk industrial applications, in particular those requiring a high level of integration of the Muting functions.

Safegate guarantees the perfect integration of all Muting sensors that can be directly connected to the access control barrier.

SMPO models can be configured via the SCS software



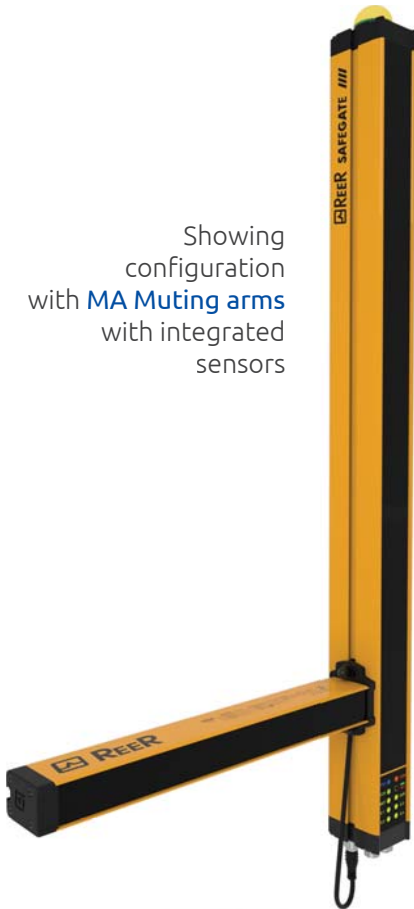
Showing configuration with **MZ Muting brackets** with M⁵ multi-beam photocells

ted Muting functions

Main features

Outstanding characteristics

Showing configuration with **MA Muting arms** with integrated sensors



SM models

Three hardware configuration options, selectable via different Master connector wiring.

L2X/P (one-way Muting with 2 crossed/parallel beams sensors).

T2X (two-way Muting with 2 crossed beams sensors).

T4P (two-way Muting with 4 parallel beams sensors).

SMO models

Same as SM models, with integrated Status and Muting lamp.

SMPO models

Allows hardware or software configuration of all Muting logics. Hardware configuration via different main connector wiring (as per SMO models). Software configuration via the provided SCS software; software configuration allows additional functional parameters options particularly useful in complicated or unordinary applications. With integrated Status and Muting lamp.

Muting sensors

MA Muting arms with pre-wired and pre-aligned sensors for all Muting logics configurations.

MZ Muting brackets with multi-beam M⁵ photocells for all Muting logics configurations.

Special versions for transparent-object detection, i.e. glass (MA TRX G) and extended-length versions for high-speed conveyors (MA TRX V).

Safegate is equipped with two integrated Muting connectors with four Muting inputs, in 4-sensors configurations, the use of a Y-splitter is mandatory.

Partial Muting

Programmable model, allows the configuration of all Muting logics and additional functional parameters via the SCS software provided.

Muting logics

Muting logics are set according to the final application and can be summarised as it follows:

L2X Logic Crossed beams (One-way, Exit-only)

Suitable solution for any applications with pallet exit.

L2P Logic Parallel beams (One-way, Exit-only)

Suitable solution for applications with transparent material: i.e. bottling industry with pallet exit.

T2X Logic Crossed beams (Two-way, Entry-Exit)

Suitable solution for the most common pallet infeed/outfeed applications. Ideal solution in case of a continuous flow of pallets even without separation between the pallets.

T4P Logic Parallel beams (Two-way, Entry-Exit)

Suitable solution for applications with transparent material and application with presence of a pallet with reduced width or not systematically centered on the conveyor.

TRX
TRANSCIEVER

Versions with passive retro-reflective elements available



Technical characteristics

Enhancing users' experience

Main features

Resolutions: 30, 40 mm - 2, 3 and 4 beams.

Emitter / Receiver and Transceiver (passive retro-reflector elements) versions .

Integration of the main safety functions, including self-testing of solid state outputs, external device monitoring (EDM) and Start/Restart interlock function.

Cross-section: 55 x 50 mm.






Protected height: 300 ... 2200 mm.

Protection rating: IP65 and IP67.

Operating temperature: -30 ... +55 °C (without condensing).

Integrated Status and Muting lamp (SMO/SMPO models).

Integrated status lamp

	GUARD Light curtain in Normal status
	MUTING Light curtain in Muting condition
Flashing 	OVERRIDE Light curtain in Override condition
	BREAK Light curtain beam interrupted
Flashing 	FAIL Light curtain in error condition

Muting arms kits, Muting brackets kits and M⁵ multi-beam photocells

Muting arms kits (MA)

MA L2X arms
(2 through-beam sensors)

MA L2P TRX arms
(2 retro-reflective sensors)

MA T2X arms
(2 through-beam sensors)

MA T4P TRX arms
(4 retro-reflective sensors)



Muting brackets kits (MZ)

MZ L2XP brackets
(with 2 M⁵ multi-beam sensors)

MZ L2XP TRX brackets
(with 2 M^{TRX} photocells)

MZ T2X brackets
(with 2 M⁵ multi-beam sensors)

MZ T2X TRX brackets
(with 2 M^{TRX} photocells)

MZ T4P brackets
(with 4 M⁵ multi-beam sensors)

MZ T4P TRX brackets
(with 4 M^{TRX} photocells)



Special versions

Special Muting arms and brackets for transparent objects applications (i.e. glass) and high-speed conveyors

M⁵ multi-beam photocell

Through-beam barrier type photocell with 5 beams.

Ideal for installation as Muting sensor, allows to detect also the most difficult objects like, for example, piles of pallets.

With a compact metal housing and a polycarbonate protective front window, it offers the right degree of robustness ideal also in the most demanding environments.

Provided with pigtail cable with M12 5-pole connector for easy installation.

The integrated status signaling lamp allows to easily verify the status of the system.

M⁵





Your future's safe!

More than 50 years of quality and innovation

Founded in Turin, Italy in 1959, ReeR distinguished itself for its strong commitment to innovation and technology.

A steady growth throughout the years allowed ReeR to become a point of reference in the safety automation industry at a worldwide level.

The Safety Division is in fact today a world leader in the development and manufacturing of safety optoelectronic sensors and controllers.

ReeR is ISO 9001, ISO 14001 and BS OHSAS 18001 certified.



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Issue 2 - Rev. 1.0
July 2018
8946243
Brochure SAFEGATE - English

Printed in Italy

