



whitepaper

Perimeter protection for access control in harsh environments

Perimeter protection is a combination of safety light curtains and physical fences with monitored gates. The objective is to prevent personnel from entering the dangerous area.

This safety system, particularly suitable for large surfaces monitoring, often is installed in external areas exposed to atmospheric agents and in harsh operating conditions. Measures are therefore needed to guarantee the functionality of the products under all conditions.

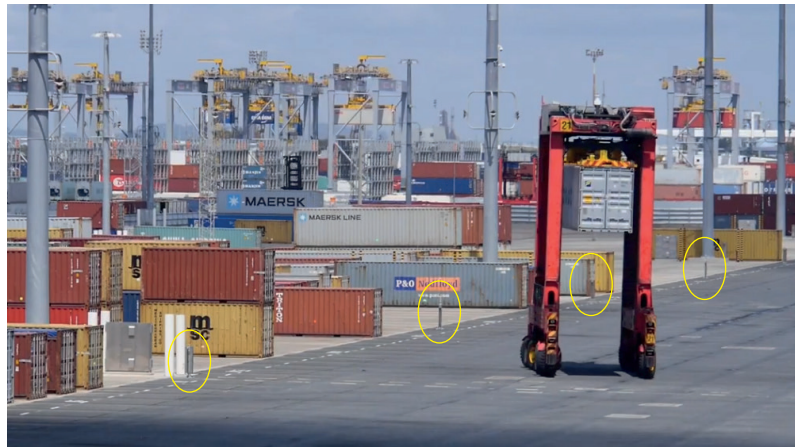
Watertight enclosures allow light curtains to be used in a harsh working environments with exposure to water and steamed and external agents (for example: direct sunlight, salt spray, snow, etc.). The WT housings furthermore provides a further mechanical protection of the light curtain

Heated versions (H) with a thermostatically-controlled heating system (can work down to -25°C).

One of the requirements relating to safety in automated ports is the protection of access gates to areas where bridge cranes, platform cranes on rails and self-driving vehicles operate.

In the picture the installation located in the port of Brisbane, Australia in the "AutoStrad™ Terminal".

The safety solution in place is a combination of safety light curtains and physical fences with monitored gates. The objective is to prevent personnel from entering the "Container Handling and Storage Area" (Dangerous Area).



The different areas of the terminal are guarded by physical fences with gates controlled by interlocked safety locks.

The dimensions of the gates and the operations conditions (outdoor) require the use of safety light curtains with specific characteristics:

- High operating range
- UV + salt resistance
- IP67 degree of protection
- Double beam system which allows to decrease the sensitivity of the barrier in relation to small objects (for example birds or material carried by the wind) which can cross the gate protected by the barrier causing the safety intervention.
- Resistance to strong temperature changes with related condensation problems.
- Stainless steel accessories and screws.

REER'S SOLUTION

With the "perimeter protection for outdoor access in harsh environments" solution, Reer supplies the entire range of products for this kind of applications.

Safety Light curtains

Admiral Long Range Dual Beam WTH UV

- Safety level: Type 4 - PLc
- Heated watertight enclosures, IP67, Salt + UV resistance
- Automatic or Manual Start/Restart and EDM
- Long Range: range up to 50 m
- Dual Beam technology
- Pre-wired with 10 m cable



2, 3 and 4 beams

	AX 2B LR DB WTH UV	AX 3B LR DB WTH UV	AX 3B LR DB WTH
Part number	1139611	1139609	1139616
Number of beams	2	3	4
Protected height (mm)	500	800	900
Overall height (mm)	902	1202	1302



Columns

FMC columns with B12 and B18 profile

Generic floor mounting column for light curtains. Anodised aluminium column with stainless steel accessories (base fixing plate and screws).



FMC Columns	FMC-B12 1200 SS	FMC-B18 1200 SS	FMC-B18 1800 SS
Part number	1200509	1200519	1200526
Size dimension (mm)	60x30	80x80	80x80
Height (mm)	1200	1200	1800

Bases for floor mounting columns

FMC-CB SS and FMC-CBL SS bases

Stainless steel bases, screws and accessories

Bases for columns CB	FMC-CB SS	FMC-CBL SS
Part number	1200507	1200508
Dimension(mm)	202x224	202x224
Height (mm)	55	34

Brackets

Set of stainless steel brackets SFB WT-LL SS (Part number: 1240901)

Set of 4 stainless steel brackets for Admiral WT with stainless steel accessories.

Installation on FMC-B12 and FMC-B18 columns.



“Perimeter protection for outdoor access in harsh environments” solution foresees:

- Admiral WTH UV with 2, 3 and 4 beams
- Mounting of the barriers, using stainless steel WT_LL SS brackets, on FMC-B12 SS or FMC-B18 SS columns. Stainless steel screws and accessories
- Stainless steel bases for FMC CB SS or FMC CBL SS columns



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More than 60 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 ISO 45001 certified.



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Code	NA 14
Product	ADMIRAL LR DB
Date	28-02-2020
Application	Perimeter protection for outdoor access in harsh environment
Object	Admiral light curtains with dual beam system for safety and stainless steel accessories for outdoor applications

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