

TagDetector Plus

Hazardous Area Monitoring and Control

- CONVEYOR BELTS
- PRODUCTION AREAS
- CONTAMINATED AREAS
- CHEMICAL AND EXPLOSIVE PRODUCT WAREHOUSES
- CONSTRUCTION SITES

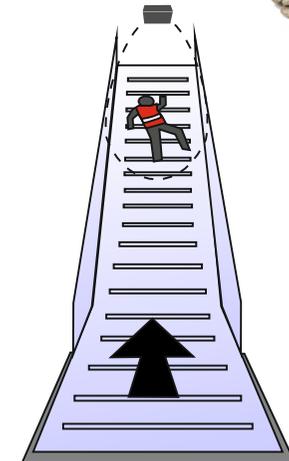
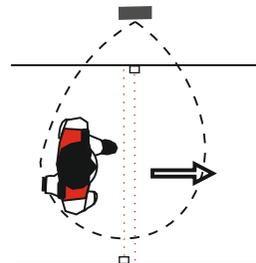
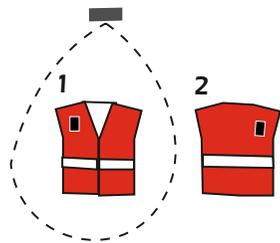


Tag Detector Plus is a monitoring and control system based on RFID technology. Using the same concept as more known Telepass for Highway applications, Tags are used to increase efficiency in safety systems for employees in Hazardous Areas.

Tag Detector Plus uses a TagMaster LS series RFID Reader to detect man presence in a specific area and **immediatly communicate** the information to Host or **send an alarm** command to controlled devices

Tag Detector Plus allow different functions for a wide range of applications:

- **TAG TEST** verifies tha Tag are correctly working before an operator starts his job session in hazardous areas;
- **AREA ACCESS CONTROL** is used for dynamic access control and presence control for restricted and dangerous areas;
- **SAFE STOP** is a real time control for hazardous areas and is able to immediately stop the controlled system when a Tag is detected.



TagDetector Plus

TAG TEST

Tag Test option is used to verify that Tags installed on the Jacket of operators are OK and ensure the Tag Detector Plus system is correctly working.

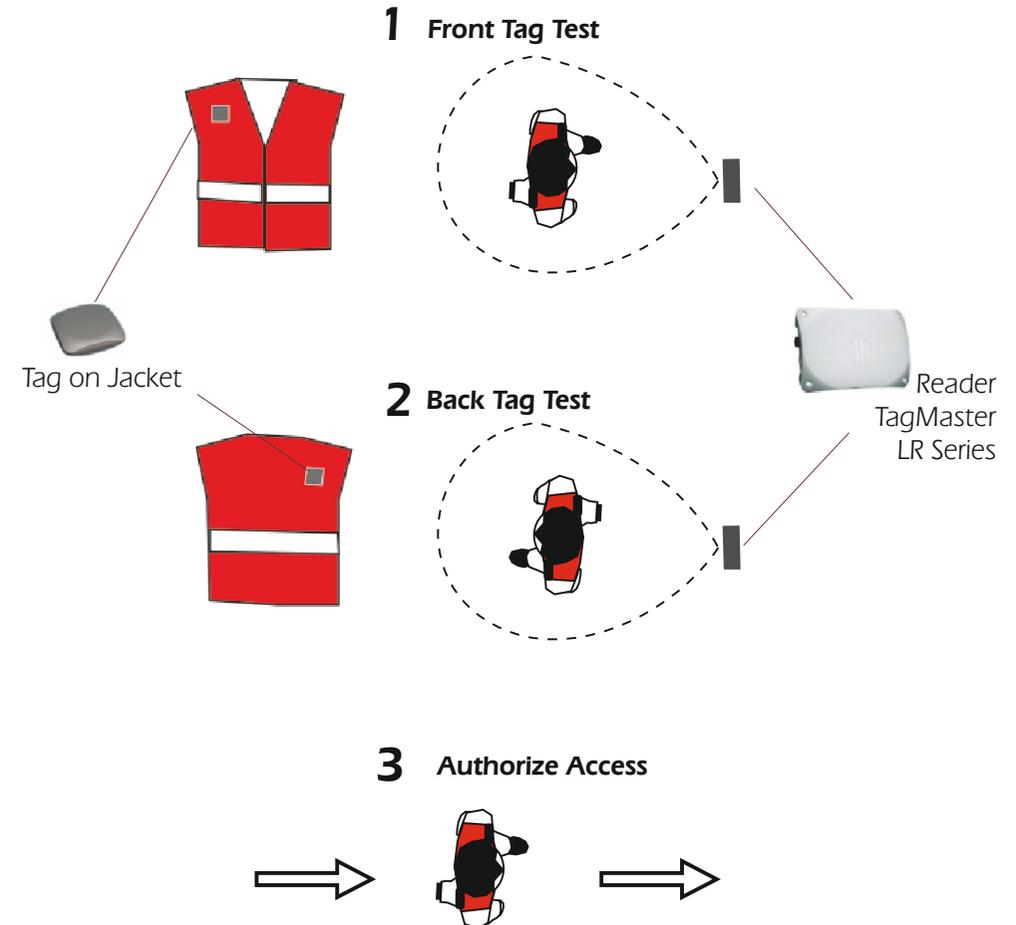
A Reader is usually placed in the changing room and workers must check Tags showing them to the device.

If Tags are OK the reader will blink a green light and signal with a particular buzzer sound.

The Reader can detect when Tags are in **Low Battery** condition: multiple buzzer sounds can be heard and a red light will be shown. This to signal the worker is not allowed to his job until the Tag has not been **replaced**.

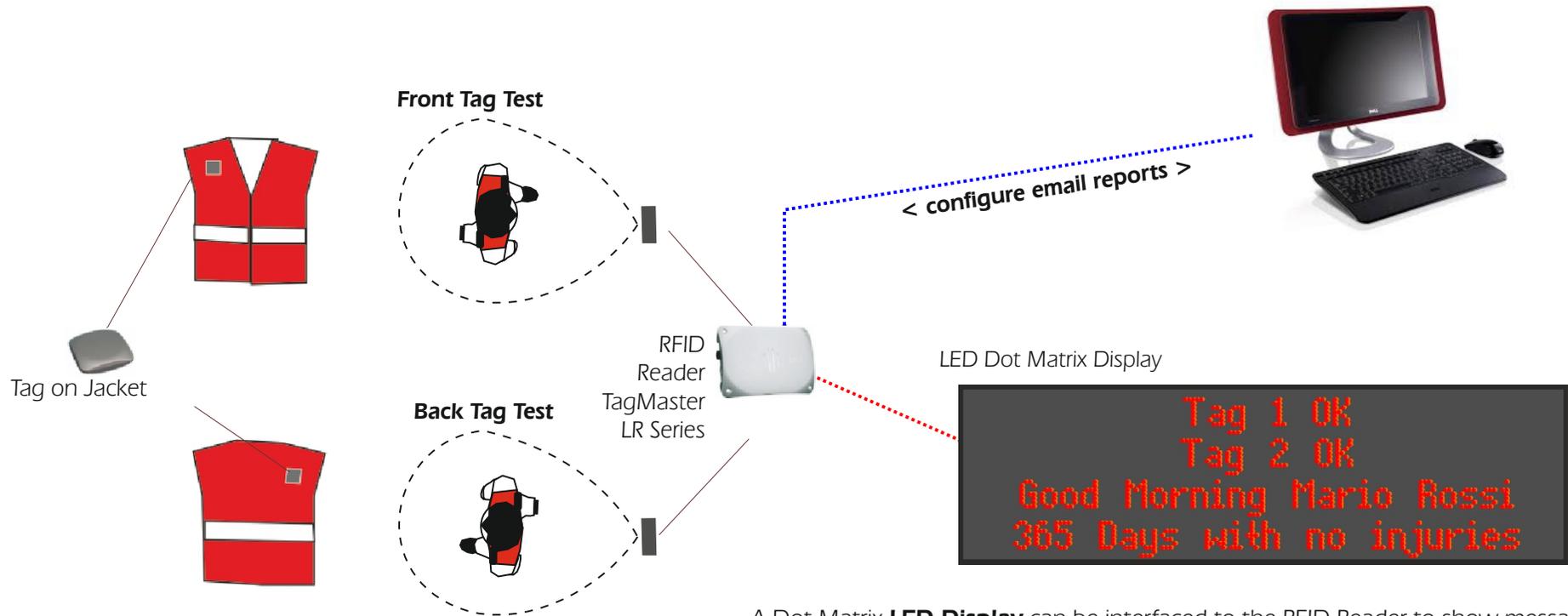
If no Tag are detected (Discharged Battery or Damaged Tag) the jacket or Tag must be replaced.

Only if both front and back Tags are correctly detected the operator is allowed to access to the work area.



TagDetector Plus

TAG TEST DISPLAY



A Dot Matrix **LED Display** can be interfaced to the RFID Reader to show messages to the users, like:

- Front and Back Tag Status
- Welcome Message for the operator
- Day count without injuries

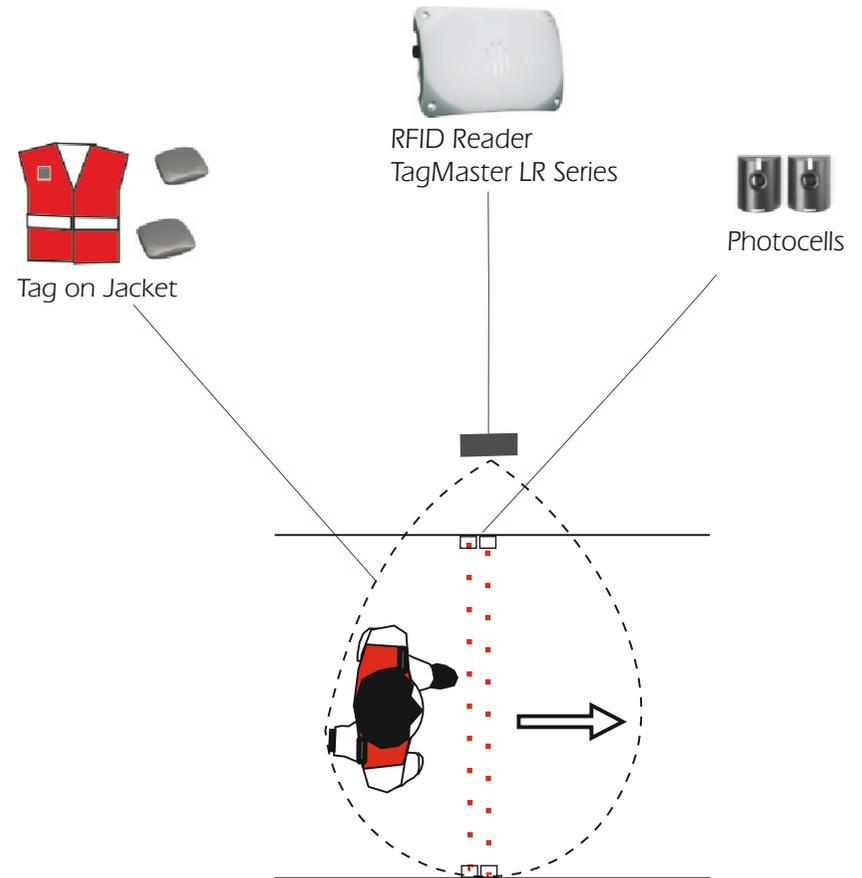
Authorize Access



Message can be customized by a computer connected to the Reader on TCP/IP in a LAN through the specific Web Browser interface. The system is able to send an email to notify detected faults (up to two addresses can be set).

TagDetector Plus

AREA ACCESS CONTROL



Area Access Control allow access control to restricted area with Tag Detector Plus System. The control is suitable both for closed or open gates with photocells.

The TagMaster LR Reader can detect a Tag used by operators and check whether the access is allowed or not.

If Tag is authorized the Reader will send a command on relay output to the barrier and will control sound and light devices if requested.

If Tag is not authorized the Reader will send an alarm action.

A powerful database application based on Linux OS stores all Tag detection and actions in the Reader Internal Memory; data can be accessed to allow off-line manipulation and visualization.

TagDetector Plus

SAFE STOP



Safe Stop option for Tag Detector Plus uses a Sacrificial Tag for diagnostics on top of the Reader. The Reader continuously checks Sacrificial Tag to verify the system is correctly working.

Safe Stop ensures a real time control in a specific area to detect **high risk** events and avoid dangerous situations with emergency stop of the machinery and signaling.

The reader is installed in the dangerous area of the machinery. A relay output is available to allow emergency stop for controlled devices.

If **Sacrificial Tag** is not detected the relay immediately stops the devices; a fault is occurred to the control system and is very dangerous operate in this condition.

If the Reader detect a different Tag than the Sacrificial Tag the relay immediately stops the controlled device; No operators must be in the field of view of the reader.

⚠ NOTE: Safe Stop and Tag Detector Plus cannot replace mandatory safety devices, but It can raise the safety control level of the system.

