



## SILER Product line

- A product range dedicated to acquisition, transmission, control and command of safety equipment



## SILER product line

# Safety Integrity Level Equipment for Railway



## Acquisition

SILER product line provides I/O interfaces dedicated to acquire informations to be utilized in a safety process. Inputs are acquired by dual channel cards, permanently tested and internally checked. Specific sensors may be used to get safety control.

Outputs are generated by dual channel cards equipped with safety output interface.

Group of outputs are checked and self tests are launched periodically.

## Transmission

SILER product line offers several types of transmission ensuring a high safety integrity level.

Data are transmitted between equipments via copper, fiber optic, or radio network.

Standard and specific protocols ensure, either over IP or directly, that data is perfectly transmitted without alteration .

SNMP interface generates alarms in case of discrepancy.

## Event recording

SILER product line integrates events recording. State changes of inputs and outputs are date and time stamped and can be easily recorded and downloaded.



## Control and command

SILER product line can link control centers and remote interlocking stations.



# SILER Products

## ► Control system SNTI

SIL2 homologated, these systems can link remote control centre, computerized or with control panel, to solid state or relay-based interlocking stations.



## ► Control system MAPA

Management of crossing station on heavy haul lines, with points and signals control, and based on wireless transmission between wayside equipments (safety level equivalent to SIL2)

## ► Level crossing monitoring & emergency control

Acquisition of level Crossing behavior (ALCB) and remote control from a station (safety level equivalent to SIL2).



## Our Area of expertise:

Our software and hardware technology expertise applies to operational railway signaling systems.

Our recognized portfolio of products installed on French national railway networks illustrates our ability to achieve customized projects with a high return on customer's investments.



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### References

- RFF/SNCF (French National Railways)
- SNIM (Mauritania)

Vossloh Cogifer and SIEMA applications experts are ready to help any railway or urban network to examine a specific technical and economic solution adapted to their operation and maintenance requirements.

For further information, please contact :

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SIEMA applications is a subsidiary of Vossloh Cogifer, a world leader in points and crossings.