

CLEARSY SAFETY CONTROLLER

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*Controller Module
4 inputs
3 outputs
Ethernet connectivity
19" rack compatible
Low power consumption*



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DESCRIPTION SYSTEM

The CLEARSY's controller is a system based on SIL4 certified architecture for vital application. The design includes several I/O and ethernet based communication port as native features. This system, ready to market, is aiming to ease demonstration and proof of concept phases. In the design phase, CLEARSY will be able to adapt the conception and/or the form factor to suit the final requirements. This product offers a fast ramp up from concept to final certified system.

SYSTEM ARCHITECTURE

It includes:

- A SIL4 certified computer (against CENELEC Standards)
- Safety critical Inputs and outputs
- An Ethernet link allowing to be connected to an external module or to another CLEARSY safety calculator
- A Railway standards compliant power supply

This architecture allows to address a lot of safety applications based on a distributed or centralized control system.

APPLICATIONS

As a modular and scalable system, the CLEARSY safety controller combined with the CLEARSY services is a relevant starting point for any safety critical custom-made solution.



■ Modules in rack

SIL4 SAFETY PROPERTIES

The CLEARSY Safety controller is targeting the development and the deployment of safety critical applications, up to SIL4. It relies on the smart integration of formal methods (including mathematical proof), redundant code generation and compilation, and a hardware platform that ensures a safe execution of the software and interfaces.

The safety principles are built-in, both at software level and at hardware level with a composite failsafe architecture.

TECHNICAL FEATURES

- Rackable module in 3 U format
- Compatible with a 19" rack
- Low power consumption
- Formal language strength
- SIL4 platform
- 4 vital and isolated inputs
- 3 vital and isolated outputs
- 1 Ethernet 100BASE-TX
- EN50126 EN50128 EN50129 compliant
- EN50155 compliant



■ SIL4 certificate