



RELY-CPPS Main Benefits

| RELY-CPPS Platform | Other automation solutions based on PLCs | Other IoT solutions based on industrial PCs |
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Advanced and flexible networking



Multimedia and multi-rate four port switch included. Advanced switching features: redundancy, zero-packet loss, VLAN configuration,... Sub-microsec. synchronization.

Proprietary field bus communications. No switching capabilities.

No switching capabilities.

Multiprotocol – sensor fusion gateway



OT & IT protocol support based on microservices, configurable by user through an embedded Web Manager tool. Sensor integration support.

Proprietary protocols. Integration with other vendor products at extra cost, when available.

Require an specific SW for supporting proprietary protocols (license and support cost). Typically only support digital I/O.

Open source platform



Based on open source platforms and open standards. No SW licenses. Interoperable with third party solutions.

Based on proprietary protocols. Require licenses and specific programming tools.

SW licenses and installation cost are not included. Need of third party SW to manage integration with other systems.

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Edge computing



Embedded tool for "Plug & Play" operation. Docker support and dynamic load for user SW & HW (FPGA) microservices.

Designed for automation. Computing would affect and reduce capacity for process control.

Only SW computing.

Low latency processing



Large processing capability. Technology based on FPGA, it allows algorithms acceleration through a hardware implementation.

Processing capability limited and oriented to control cycles.

Different processing capability, depending on the model. The software is managed by generalist Operating Systems.

Adaptability and scalability



Full "in-house" design. Short time-to-market for product adaption. FPGA technology allows HW programming and upgrade (TSN, etc.).

Customer limited access to product adaptation. COTS products.

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Cyber security



- Robust root-of-trust for certificate management with integrated TPM
- Secure boot and secure storage of firmware
- Integrated security sensors
- Protocols for secure communications and authentication (SSH, IPSec, TLS, HTTPs, Radius, etc.)
- Optional SIEM agent

Based on closed protocols and security-by-isolation.

Do not implement security mechanisms from ICS (Industrial Control Systems).