



Radics has developed and delivered a digital I&C platform that is robust, flexible, and scalable. It provides state-of-the-art functions, services, and safeguards for both safety and non-safety applications in the nuclear industry. The RadICS product line consists of a Logic Module, basic input/output modules, and specialty modules all housed in a seismically qualified chassis.

The RadICS Chassis consists of 16 physical module slots, module communication and power supply backplane, and two fans (with associated control board). The RadICS Chassis (in qualified configuration) has a slot for 1 Logic Module and 14 slots for various I/O and Optical Communication (OCM) Modules. Each of the slots is equipped for proper and safe module installation and is configured with electrical protection for each module.



Chassis

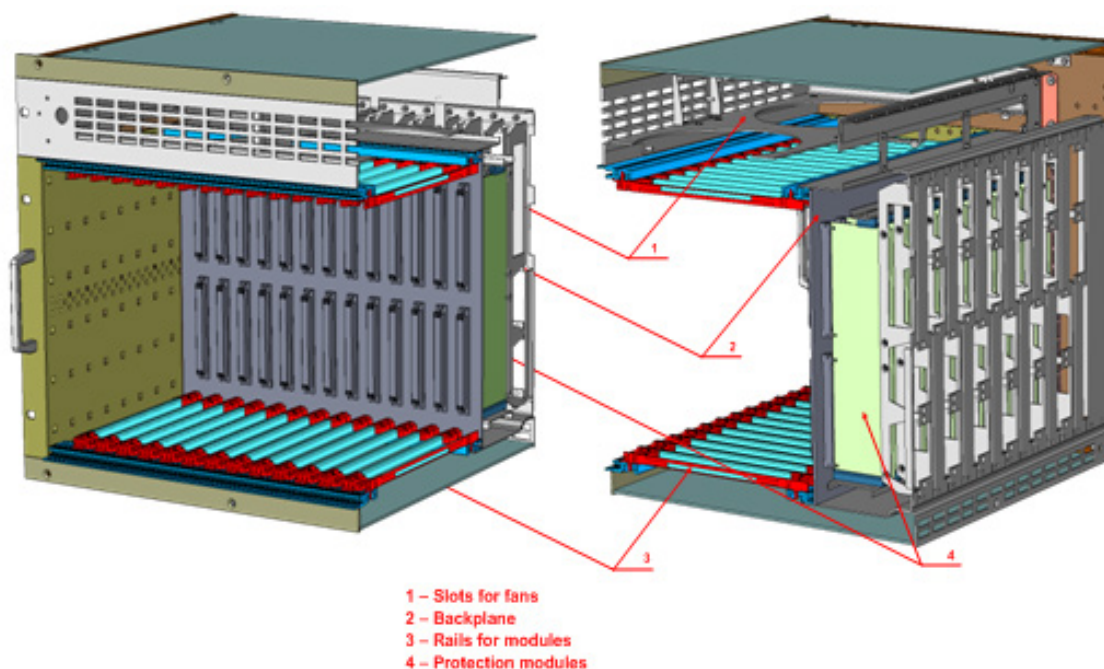
- Standard 19-inch rack installation fit
- Two redundant 24 VDC supply inputs for distribution to each Module slot.
- I/O and OCM slots are configurable with rear accessible interface protection modules for module electrical protection
- Backplane for communication between the RadICS Modules, using direct individual lines from each I/O and OCM slot to the LM slot.
- Human Factor Features including:
 - Labeling to identify slot allocation
 - Visually verifiable tie-down clamps
 - Blanks covering all unused slots
 - Front mounted fiber optic connectors for LM and OCM
 - Rear-connected I/O and OCM cabling
 - Special coding pegs prevent I/O and OCM Modules from being inserted into the wrong slot
- Qualified to NRC-approved requirements for environmental, seismic, and electromagnetic compatibility.

20 Years of Proven Innovation for the Global Nuclear Industry



Chassis Technical Specifications

Chassis capacity	1 Logic Module Slots 14 Input/Output/Communication Module Slots
Backplane Communications	Galvanic-isolated point-to-point LVDS Tx / Rx
Self-diagnostic functions	Ventilation module detects fan failures
Power consumption	2 independent and redundant inputs – 24 (18 – 36) VDC / 1 amp (without modules) Distributed to all module slots
Indications	2 fan status LED indicators
Keyswitches	2 keyswitches provided for LM Tuning function
Operating temperature	4.4 to 60 °C (40 to 140 °F)
Operating humidity	10 to 90% relative humidity, non-condensing



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RadICS Platform is the only FPGA-based I&C platform with a SIL 3 certification in a single channel configuration. The Platform is reviewed and approved by U.S. NRC. Radics LLC provides engineering, testing and commercial grade dedication services for nuclear power clients on international markets to meet local nuclear regulatory requirements and ensure safety and reliability at nuclear power genera on sites.