



Radiy 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

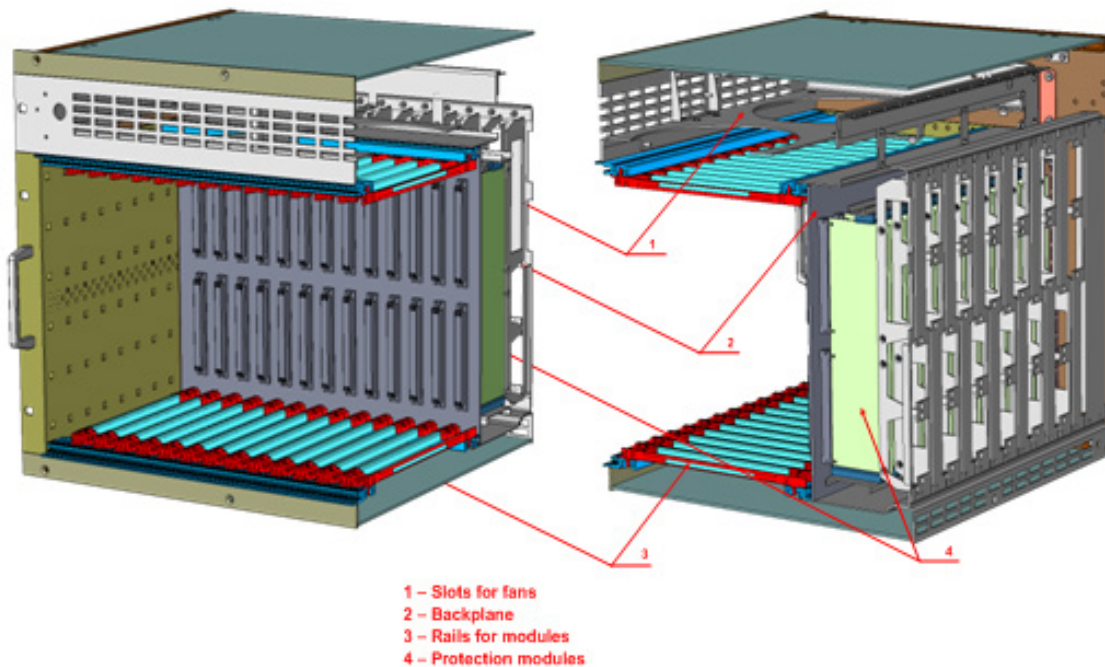
- Standard 19-inch rack installation fit
- Two redundant 24 VDC supply inputs for distribution to each Module slot.
- I/O and OCM slots are configurable with rear accessible interface protection modules for module electrical protection
- Backplane for communication between the RadICS Modules, using direct 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

<b>Chassis capacity</b>	2 Logic Module Slots (one slot used in qualified configuration) 14 Input/Output/OCM Module Slots
<b>Backplane Communications</b>	Galvanic-isolated point-to-point LVDS Tx / Rx
<b>Self-diagnostic functions</b>	Ventilation module detects fan failures
<b>Power consumption</b>	2 independent and redundant inputs – 24 (18 – 36) VDC / 0.5 amp (without modules) Distributed to all module slots
<b>Indications</b>	2 power status LED indicators
<b>Keyswitches</b>	2 keyswitches provided for LM Tuning and Safety Override functions
<b>Operating temperature</b>	4.4 to 60 °C (40 to 140 °F)
<b>Operating humidity</b>	10 to 90% relative humidity, non-condensing



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For more than 20 years Radiy has provided advanced instrumentation and control (I&C) solutions for nuclear power plant modernization and new build projects in the global market. Radiy's main I&C product, the RadICS I&C Platform, was developed specifically for use in nuclear power plants. It is the only FPGA-based I&C platform with a SIL 3 certification in a single channel configuration. Radics, a wholly owned LLC, provides delivery services for the RadICS I&C Platform for international markets to meet local regulatory requirements. Radiy also offers industrial control systems, electrical equipment, and reverse engineering services.