About
Curtiss-Wright Nuclear has partnered with Radics, LLC to supply integrated FPGA-based instrumentation and control (I&C) systems for nuclear power plants and research reactors. RadICS is a digital I&C platform that is robust, flexible, and scalable. It provides state-of-the-art functions, services, and safeguards for 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 Interface Protection Modules provide electromagnetic compatibility and other electrical hazards protection for the input and output modules of RadICS Platform. Each device supports connection to up to 32 field signals. Where appropriate, custom field signal termination cables can be provided to minimize installation complexity and time. Up to 12 modules are housed in a single chassis.

Interface Protection Modules (IOPM)
- Provides electromagnetic compatibility, overvoltage, overcurrent, electrostatic discharge, and other electrical hazards protection for the RadICS input, output and communication modules.
- Passive component usage for maximum reliability.
- Custom signal conditioning.
- Custom field termination cables.
- Staggered connection locations (top/bottom) for maximum cable connectivity.
- IEC 61508 SIL 3 certification.
## Interface Protection Module Technical Specifications

<table>
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<th>Function</th>
<th>Specifications</th>
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| Electrostatic Discharge Protection | 15 kV air discharge  
8 kV contact discharge       |
| Input/Output Channel Isolation  | All input and output channels are galvanic-isolated up to 250 V<sub>RMS</sub> AC or 250 VDC  
field-to-chassis and channel-to-channel |
| Overvoltage Protection          | Specific to module type                                                        |
| Operating Temperature           | 4.4 to 60 °C (40 to 140 °F)                                                   |
| Operating Humidity              | 10 to 90% relative humidity, non-condensings                                   |