



FlexArmor

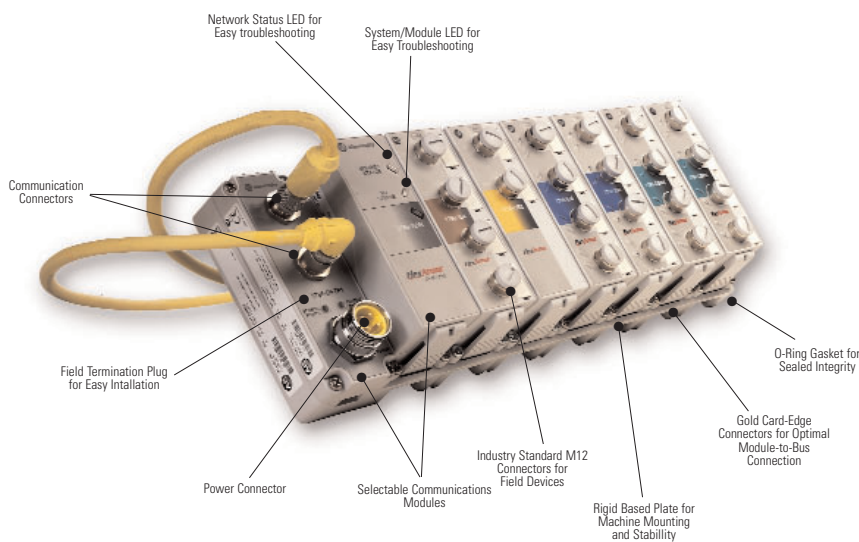
- **Hardened, Fully Modular**
- **Zero Cabinet Design**
- **Multiple Network Connectivity**

What is FLEX Armor?

FLEX Armor™ I/O is a hardened, fully modular, expandable I/O system designed to be distributed throughout your application and mounted directly on your machine or in the Class I Div 2 area. FLEX Armor is designed for the harsh, shop-floor applications where dust, grease, water and other particulate materials easily damage standard equipment. Rated NEMA 4X (indoor/outdoor), 6P, IP65/67, FLEX Armor offers the cost savings you expect in a distributed I/O platform without the added costs of an enclosure.

Use FLEX Armor in the areas where a mounting cabinet just won't work.

- With its small footprint and modular construction, FLEX Armor can be built and optimized around your application.
- Leveraging FLEX I/O technology, FLEX Armor's diagnostic features and module Remove/Insert Under Power (RIUP) maximize uptime and make FLEX Armor a highly maintainable, enclosureless I/O platform.
- FLEX Armor's Quick-Disconnect sealed connectors, flexible and modular construction and robust status indicators reduce commissioning time.
- Using the advantages of DeviceNet™ network, FLEX Armor enables a user to effectively move data between field devices and the logic controllers such as the Allen-Bradley ControlLogix system.
- FLEX Armor I/O is compatible with industry standard sensors and actuators, as well as Allen-Bradley's full line of cables, cordsets, limit switches, optical encoders and the Series 9000 photoelectric and WorldProx™ proximity sensors.
- FLEX Armor is also available on PROFIBUS DP.



Why FLEX Armor?

FLEX Armor brings you reliable designs, versatile usage, ease of maintenance, and cost efficiency. This in turn reduces life-cycle costs (installation time, troubleshooting time and downtime). Here are a few examples of why FLEX Armor is ideal for your application.

FLEX Armor Features	What Does it Mean to You?
Reliable and Proven Technology Leverages and expands on the proven FLEX I/O technology used in other Allen-Bradley I/O platforms like FLEX I/O, FLEX Integra and FLEX Ex.	Immediate Productivity No re-learning of new technology because you re-use the same software tools, configuration methods and proven FLEX I/O technology. This reduces implementation time and training costs.
Hardened, Enclosureless, On-machine Mounting Designed to handle the dust, grease, oil, water, high vibration, high shock and outdoor elements. NEMA 4X (indoor/outdoor), 6P, IP65/67, UV rated, -20-60°C operation. Quick-Disconnect terminated cables.	Cost Savings Zero Cabinet – No cabinet or enclosure required. This reduces wiring and installation time.
Versatile Available in 2, 4, 6 and 8 slots base plates. Digital and Analog modules. Any mix of I/O up to 64 points per node. Use virtually any 2-wire or 3-wire, IEC 1131-2 Type 1, 1+ or 2 sensor.	Investment Smart Modularity enables you to invest only the I/O that you need. Leave some empty slots for future expansion. This reduces future installation costs. The flexibility of mixing and matching the I/O types allows you to run application, specific to your needs and pre-plan for future expansions.
Diagnostics Diagnostics at point-level, module-level, network-level and system-level. Visible network status and point status indicators.	Easy to Use, Monitor and Maintain Clear indication of fault conditions. This helps maximize productivity and maintain system uptime.
Remove/Insert Under Power (RIUP) Module, Bus and power independence. Allows replacement of faulted I/O modules without interrupting operation to other modules. DeviceNet Auto Device Replace (ADR) Node is automatically re-configured when faulted I/O module or node is replaced on the network.	Easy to Maintain Application continues to run even when a module has to be removed. No re-configuration necessary when node is replaced. This increases uptime / reduces troubleshooting time.
Highest level of Certifications CUL, UL, CSA, CE and C-Tick and DeviceNet (interoperability and conformance to the standard via the Open DeviceNet Vendor Association)	Well-Rounded Benefits Product certified to global standards of quality, operation, performance and reliability. This means smart investment that provides system uptime and productivity.

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Breadth of I/O

FLEX Armor I/O Base Plate

- 1798-BP2: 2-slot base plate
- 1798-BP4: 4-slot base plate
- 1798-BP6: 6-slot base plate
- 1798-BP8: 8-slot base plate

Network and Field Power Connections

- 1798-ADN: DeviceNet communications adapter
- 1798-APB: PROFIBUS DP DP communications adapter, up to 12 Mbps
- 1798-DFTP1: DeviceNet Field Termination Plug (FTP) with two M12 network connectors and one M18 Sensor/Output power connector
- 1798-DFTP2: DeviceNet Field Termination Plug (FTP) with two M18 network connectors and one M18 Sensor/Output power connector
- 1798-PFTP1: PROFIBUS DP DP Field Termination Plug (FTP) with two M12 network connectors and one M18 Sensor/Output power connector

I/O Modules

- 1798-IB4: 4-point 24 VDC digital sinking input
- 1798-IB4D: 4-point 24 VDC sinking input with diagnostics
- 1798-IB8: 8-point 24 VDC digital sinking input
- 1798-IE4: 4-channel analog input-current or voltage
- 1798-OB4E: 4-point 24 VDC/0.5 A Electronically Protected sourcing output
- 1798-OB8E: 8-point 24 VDC/0.5 A Electronically Protected sourcing output
- 1798-OE2: 2-channel analog output-current or voltage
- 1798-N2: Filler module

Applications

- Automotive: Transportation, Powertrain, Body/Assembly
- Material Handling: Sortation, Transfer Lines, Conveyor Transport Systems
- Food and Beverage: Bottling, Canning and Filling
- Label Machines
- HVACR
- Packaging
- Valve Manifold Interface Design
- Assembly/Sub-assembly
- Dial Machines and Others

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