

# Axioline Smart Elements

MARCH 2021

## Description

I/O is critical in providing data for automation systems, and data is king, whether referring to I/O signals directly connected on the PLC, or those distributed over industrial automation networks. The collection of this data can be achieved in various ways, and the market is very demanding, constantly pushing manufacturers to meet ever-changing needs. As the newest addition to the Axioline product family, Smart Elements presents the perfect solution.

## What makes Smart Elements a winner

### **EXTREMELY COMPACT**

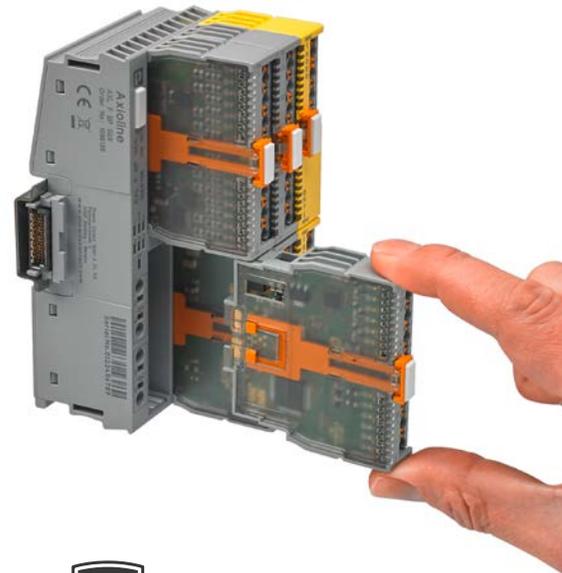
Smart Elements reduces DIN rail usage by approximately 25 percent. Save space with the ability to stack Smart Elements two high, making it possible to fit up to 32 I/O channels on 15mm of rail space! This ingenious design combined with the Smart Elements' flexible modularity allow the combination of digital, analog, and/or special function elements in a single base, maximizing station density while maintaining high modularity.

### **EASY**

Take advantage of simple push-in technology to wire and configure all I/O, reducing the need for tools and optimizing the wiring process. Smart Elements require little to no parameterization for quick and easy configuration using the head station and plug-and-play feature. Advanced configuration, while not necessary, can be achieved using the Startup+ freeware configuration and diagnostic tool.

### **ECONOMICAL**

There are three key aspects that make the Smart Elements I/O module a cost-saving option. First, Smart Elements requires less DIN rail space. Further contributing to cost savings, push-in technology reduces wiring and configuration time. Finally, we pass on additional savings with our low list pricing, making Axioline Smart Elements extremely competitive against similar devices in the market.



Certain restrictions apply. Go to [www.phoenixcontact.com/LLW](http://www.phoenixcontact.com/LLW) to review the terms and conditions.

### **USA**

PHOENIX CONTACT

P.O. Box 4100

Harrisburg, PA 17111-0100

Phone: 800-888-7388

717-944-1300

Technical Service: 800-322-3225

Fax: 717-944-1625

Email: [info@phoenixcon.com](mailto:info@phoenixcon.com)

Website: [www.phoenixcontact.com](http://www.phoenixcontact.com)

# Axioline Smart Elements

Axioline Smart Elements are an extension of the Axioline F I/O system, providing an extremely compact modular I/O option. Bases can be directly integrated with Axioline F backplanes and are compatible with all BKs and controllers.

## I/O connection

8 or 16 alternately arranged terminal points with Push-in connection technology

## Diagnostic and status indicators

- Two redundant red error LEDs
- Status LEDs (depending on the version)

## Dimensions

62 mm x 15 mm x 62 mm  
(L x W x H)

## Axioline Smart Element slots

4 or 6 slots for Smart Elements  
AXL F BP SE4: 1088135  
AXL F BP SE6: 1088136

## Release mechanism

Mounting: locking mechanism in slot  
Removal: release and pull-out aid

## Smart Element interface

- Communications power USE
- 24 V DC I/O supply UP
- Communication with Smart Element slot

## Diagnostic and status LEDs

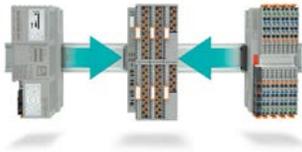
- Power supply (UP)
- Local bus diagnostics (D1 ... D6)

## Axioline F local bus

Can be combined with all Axioline F controllers and bus couplers

## Feed-in (Push-in technology)

24 V DC I/O supply UP  
Up to 16 A  
0.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>



## Axioline Smart Elements

Axioline Smart Element stations consist of either a controller or bus interface module, one or more base units, and any combination of available smart elements to meet your I/O needs. Digital and analog smart elements are configuration-free for simplified integration. Special function elements may require some basic configuration which can be accomplished using the freeware Startup+ configuration software. If additional I/O signal types are not available in smart elements, standard AXL F I/O modules can be added to backplane.

Item code	Designation	Function
<b>Controller</b>		
2404267	AXC2152	PLCnext Control for the direct control of Axioline F I/Os
<b>Bus Interface</b>		
2702782	AXL F BK EIP EF	Axioline F, Bus coupler, EtherNet/IP™
2688459	AXL F BK ETH	Axioline F, Bus coupler, Modbus/TCP (UDP)
2701815	AXL F BK PN	Axioline F bus coupler for PROFINET
<b>Smart elements</b>		
<b>Base units</b>		
1088136	AXL F BP SE6	Axioline F, Backplane, 6 slots for Axioline Smart Elements
1088135	AXL F BP SE4	Axioline F, Backplane, 4 slots for Axioline Smart Elements
<b>Digital I/O</b>		
1088127	AXL SE DI16/1	Digital input module, Digital inputs: 16, 24 V DC
1088129	AXL SE DO16/1	Digital output module, Digital outputs: 16, 24 V DC, 500 mA
<b>Analog I/O</b>		
1088062	AXL SE AI4 I 4-20	Analog input module, Analog inputs: 4, 4 mA ... 20 mA
1088104	AXL SE AI4 U 0-10	Analog input module, Analog inputs: 4, 0 V ... 10 V
1088123	AXL SE AO4 I 4-20	Analog output module, Analog outputs: 4, 4 mA ... 20 mA
1088126	AXL SE AO4 U 0-10	Analog output module, Analog outputs: 4, 0 V ... 10 V
<b>Temperature</b>		
1088106	AXL SE RTD4 PT100	Analog RTD inputs: 4 (Pt 100)
<b>Special function *configurable using Startup+</b>		
1088130	AXL SE INC1 SYM	Position detection module, Incremental encoder input: 1, symmetrical encoders
1088131	AXL SE CNT1	Counter input: 1, Control input: 1, Counting direction input: 1, Digital output: 1, 24 V DC, 100 mA
1088128	AXL SE RS485	Communication module, interface: RS-485
1088132	AXL SE IOL4	IO-Link master, 4 IO-Link ports
<b>Blank Cover *required of all empty slots</b>		
1088134	AXL SE SC-A	Slot cover

