

SIMATIC S7-400 advanced controller

Analog modules

SM 431 analog input module

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Technical specifications (continued)

Article number	6ES7431-7QH00-0AB0	6ES7431-7KF00-0AB0	6ES7431-7KF10-0AB0
	SM 431, 16AE, U/I/R/PT100, 16BIT	SM 431, 8AI, U/I/THERMO, 16BIT	SM 431, 8AI, RESIST/PT100, 16BIT
Isolation			
Isolation checked with	2120 V DC between bus and L+/M; 2120 V DC between bus and analog part; 500 V DC between bus and local ground; 707 V DC between analog part and L+/M; 2120 V DC between analog part and local ground; 2120 V DC between L+/M and local ground	1500 V DC	1500 V DC
Dimensions			
Width	25 mm	25 mm	25 mm
Height	290 mm	290 mm	290 mm
Depth	210 mm	210 mm	210 mm
Weights			
Weight, approx.	500 g	650 g	650 g

Ordering data

Article No.	Article No.
SM 431 analog output modules	
16 inputs, non-isolated, 13 bit	6ES7431-0HH00-0AB0
8 inputs, isolated, 13 bit	6ES7431-1KF00-0AB0
8 inputs, isolated, 14 bit, with linearization	6ES7431-1KF10-0AB0
8 inputs, isolated, 14 bit	6ES7431-1KF20-0AB0
16 inputs, isolated, 16 bit, process interrupt capability	6ES7431-7QH00-0AB0
8 inputs, isolated, 16 bit, process interrupt capability, for thermocouples (I, U)	6ES7431-7KF00-0AB0
8 inputs, isolated, 16 bit, process interrupt capability, for thermal resistors	6ES7431-7KF10-0AB0
Front connector	
48-pin	
• with screw contacts, 1 unit	6ES7492-1AL00-0AA0
• with screw contacts, 84 units	6ES7492-1AL00-1AB0
• with spring-loaded terminals, 1 unit	6ES7492-1BL00-0AA0
• with crimp contacts, 1 unit	6ES7492-1CL00-0AA0
• with crimp contacts, 84 units	6ES7492-1CL00-1AB0
1 unit; for 6ES7431-7KF00-0AB0; spare part, included in scope of delivery	6ES7431-7KF00-6AA0
Measuring range module for analog inputs	
1 module for 2 inputs (spare part)	6ES7974-0AA00-0AA0
Cover film for labeling strips	
Spare part	6ES7492-2XX00-0AA0
Labeling sheets for machine inscription	
DIN A4, for printing using laser printer; pack of 10	
petrol	6ES7492-2AX00-0AA0
light-beige	6ES7492-2BX00-0AA0
yellow	6ES7492-2CX00-0AA0
red	6ES7492-2DX00-0AA0
SIMATIC Manual Collection	
Electronic manuals on DVD, multilingual: LOGO!, SIMADYN, SIMATIC bus components, SIMATIC C7, SIMATIC distributed I/O, SIMATIC HMI, SIMATIC Sensors, SIMATIC NET, SIMATIC PC Based Automation, SIMATIC PCS 7, SIMATIC PG/PC, SIMATIC S7, SIMATIC Software, SIMATIC TDC	6ES7998-8XC01-8YE0
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SIMATIC S7-400 advanced controller

Connection methods

Front connectors

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Overview



- For simple and user-friendly connection of sensors and actuators
- For retaining the wiring when replacing modules
- With coding to avoid mistakes when replacing modules

Ordering data

Article No.

Front connectors

48-pin for signal modules, function modules; 1 unit

- With screw contacts
- With spring-loaded terminals
- With crimp contacts

6ES7492-1AL00-0AA0

6ES7492-1BL00-0AA0

6ES7492-1CL00-0AA0

48-pin for signal modules, function modules; 84 units per pack

- With screw contacts
- With crimp contacts

6ES7492-1AL00-1AB0

6ES7492-1CL00-1AB0

for 6ES7 431-7KF00-0AB0; spare part, included in scope of delivery; 1 piece

6ES7431-7KF00-6AA0

Crimp contacts

6XX3070

250 units

Crimping tool

6XX3071

for crimping the contacts

Front cover for front connector

6ES7492-2XL00-0AA0

6 units

Connection terminal for modules

6ES7490-1BA00-0AA0

6 units

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6ES7998-8XC01-8YE0

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