

3.7 Digital input module SM 321; DI 32 x DC 24 V; (6ES7321-1BL00-0AA0)

Order number: "Standard module"

6ES7321-1BL00-0AA0

Order number: "SIPLUS S7-300 module"

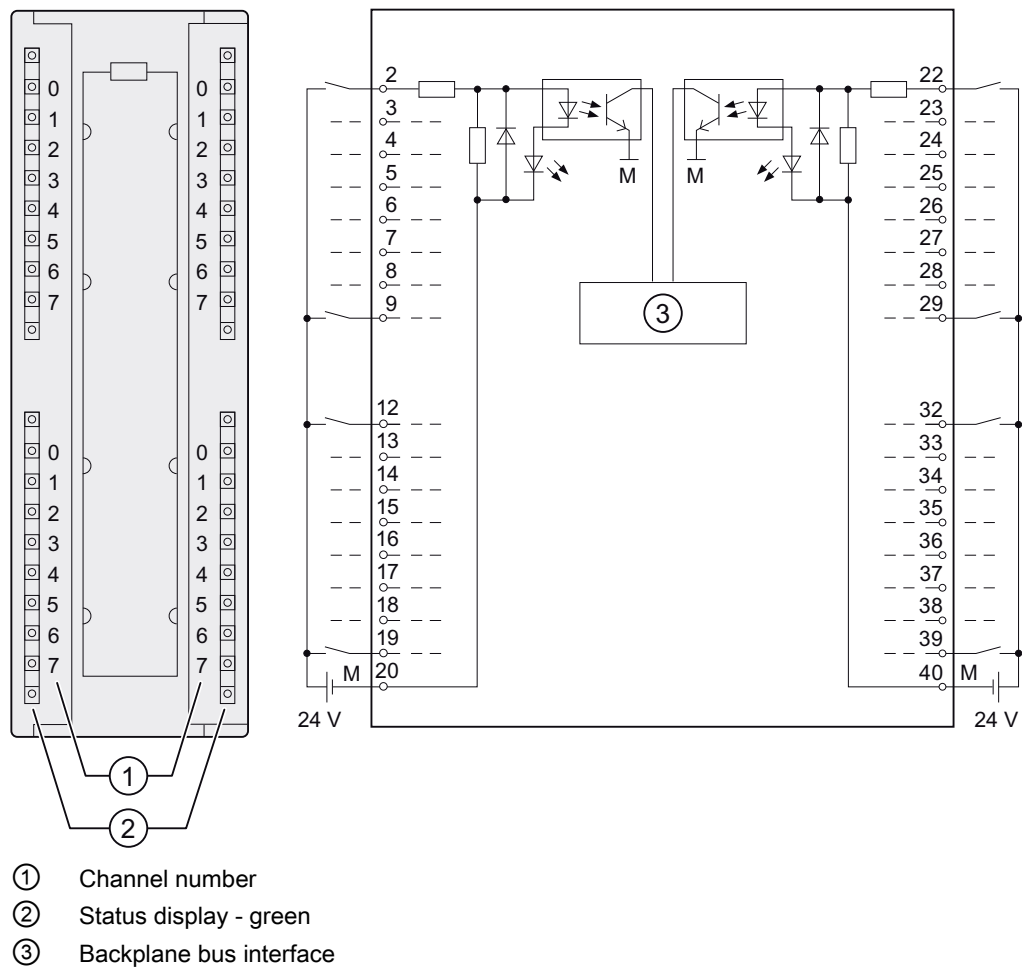
6AG1321-1BL00-2AA0

Properties

Properties of SM 321; DI 32 x DC 24 V:

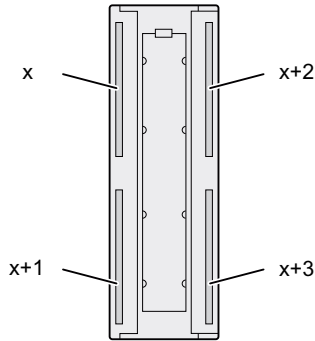
- 32 inputs, isolated in groups of 16
- Rated input voltage 24 VDC
- Suitable for switches and 2-/3-/4-wire proximity switches (BEROs)

Wiring and block diagrams of SM 321; DI 32 x DC 24 V



Terminal assignment of SM 321; DI 32 x DC 24 V

The figure below shows how channels are assigned to addresses (input byte x up to input byte x+3).



Technical specifications of SM 321; DI 32 x DC 24 V

Technical specifications	
Dimensions and weight	
Dimensions W x H x D (mm)	40 x 125 x 120
Weight	ca. 260 g
Module-specific data	
Supports isochronous mode	No
Number of inputs	32
Cable length	
• Unshielded	Max. 600 m
• Shielded	Max. 1000 m
Front connector	40-pin
Voltages, currents, potentials	
Number of simultaneously controlled inputs	
• Horizontal mounting position	
to 40 °C	32
to 60 °C	16
• Vertical arrangement	
to 40 °C	32
Electrical isolation	
• between channels and the backplane bus	yes
• Between channels	Yes
– in groups of	16

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Technical specifications	
Maximum potential difference • Between different circuits	75 VDC/60 VAC
Isolation test voltage	500 VDC
Current consumption • From the backplane bus	Max. 15 mA
Power loss of the module	Typ. 6.5 W
Status, interrupts, diagnostics	
Status display	Green LED per channel
Interrupts	None
Diagnostic functions	None
Sensor selection data	
Input voltage • Rated value • "1" signal • "0" signal	24 VDC 13 V to 30 V - 30 V to + 5 V
Input current • "1" signal	Typ. 7 mA
Input delay • "0" to "1" transition • "1" to "0" transition	1.2 ms to 4.8 ms 1.2 ms to 4.8 ms
Input characteristics	to IEC 61131, type 1
Connection of 2-wire BEROs • Permissible quiescent current	Supported Max. 1.5 mA
Connection of the signal transmitters	Using a 40-pin front connector