3.7 Digital Input Module SM 321; DI 16 x VDC 24; (6ES7321-1BH02-0AA0)

Order number: "Standard module"

6ES7321-1BH02-0AA0

Order number: SIPLUS S7-300 module

6AG1321-1BH02-2AA0

Characteristics

The digital input module SM 321; DI 16 x 24 VDC has the following salient features:

- 16 inputs, isolated in groups of 16

- 24 VDC rated input voltage

- Suitable for switches and two / three / four-wire BEROs (proximity switches).

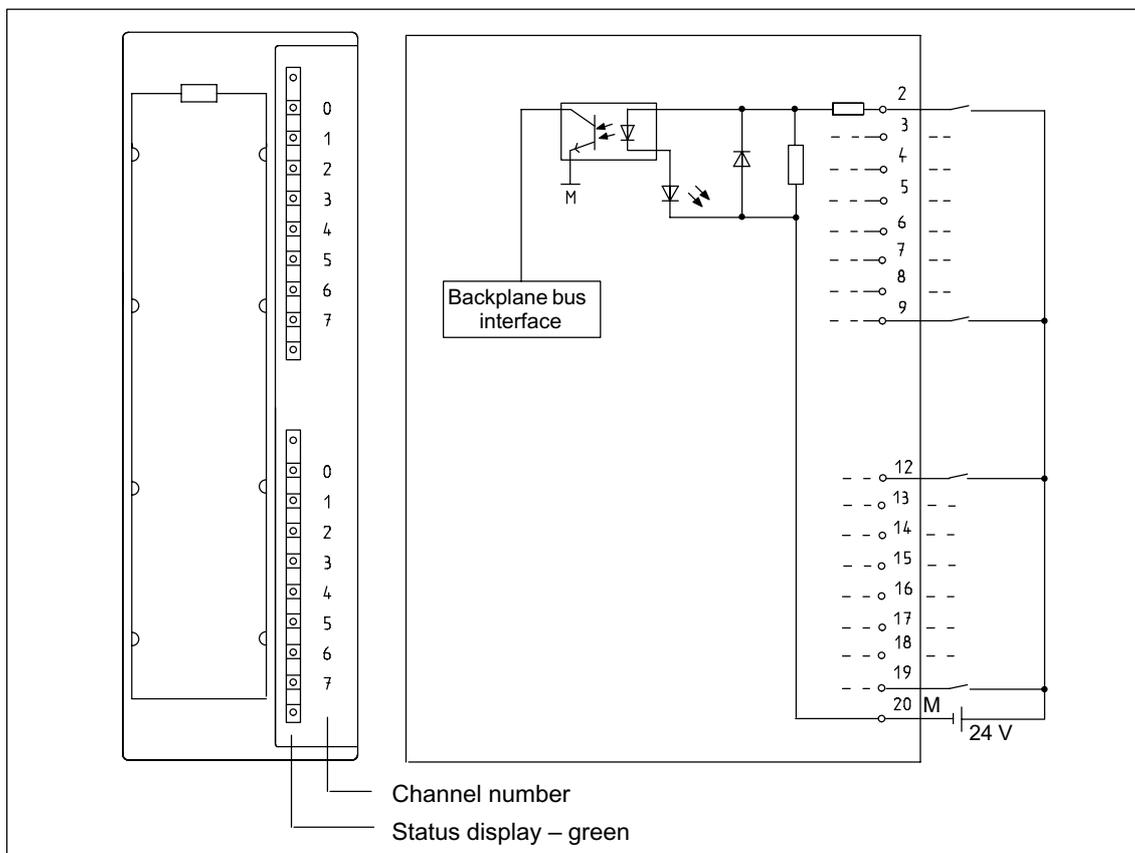### Terminal assignment and block diagram of the SM 321; DI 16 x 24 VDC

Figure 3-4   Module View and Block Diagram of Digital Input Module SM 321; DI 16 x 24VDC

Technical specifications of the SM 321; DI 16 x 24 VDC

Dimensions and Weight	
Dimensions W x H x D (in millimeters)	40 x 125 x 117
Weight	Approx. 200 g
Data for Specific Module	
Supports clocked operation	No
Number of inputs	16
Length of cable	
• Unshielded	max. 600 m
• Shielded	max. 1000 m
Voltages, Currents, Potentials	
Number of inputs that can be triggered simultaneously	
• Horizontal configuration	
Up to 60 °C	16
• Vertical configuration	
Up to 40 °C	16
Isolation	
• Between channels and backplane bus	Yes
Permitted potential difference	
• Between the different circuits	75 VDC / 60 VAC
Insulation tested with	500 VDC
Current consumption	
• From the backplane bus	max. 10 mA
Power dissipation of the module	typ. 3.5 W
Status, Interrupts, Diagnostics	
Status display	Green LED per channel
Interrupts	None
Diagnostic functions	None

Data for Selecting a Sensor	
Input voltage	
• Rated value	24 VDC
• For signal "1"	13 to 30 V
• For signal "0"	–30 to + 5 V
Input current	
• At signal "1"	typ. 7 mA
Input delay	
• At "0" to "1"	1.2 to 4.8 ms
• At "1" to "0"	1.2 to 4.8 ms
Input characteristic curve	According to IEC 61131, type 1
Connection of Two-Wire BEROs	Possible
• Permitted bias current	max. 1.5 mA