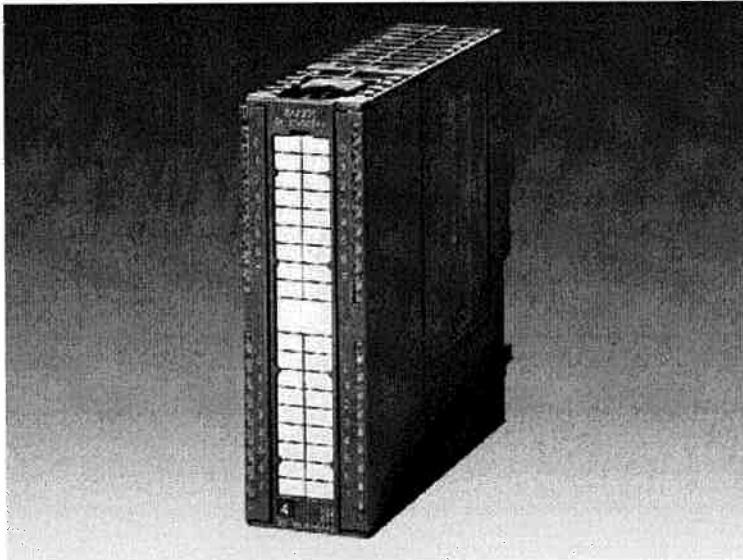


Digital input/output modules - SM 321 input module



Overview

Application

Digital input modules convert the levels of the external digital signals transmitted from the process to the internal S7-300 signal levels. The modules are suitable for the connection of switches and 2-wire BERO proximity switches.

Design

Digital input modules are characterized by the following mechanical features:

- Compact design:
The solid plastic housing contains:
 - Green LEDs to indicate signal states at the inputs
 - Front connector protected by the front cover
 - Labeling area on the front cover.
- Easy assembly:
There are no slot rules: The input addresses are defined by the slots
- User-friendly wiring.

Technical data

SM 321 6ES7 321-	1BH01-0AA0 1BH81-0AA0 ¹⁾	1BH50-0AA0	1BL00-0AA0
Number of inputs	16	16; source input	32
Rated load voltage L+/L1			
• Rated value	24 V DC	24 V DC	24 V DC
• Acceptable range	20.4 V to 28.8 V		
Input voltage			
• Rated value	24 V DC	24 V DC	24 V DC
• for "1" signal	15 to 30 V	15 to 30 V	13 to 30 V
• for "0" signal	-3 to +5 V	-3 to +5 V	-3 to +5 V
• Frequency	-	-	-
Isolation (to backplane bus)	Optocoupler		
• in groups of	16	16	32
Input current			
• for "1" signal, typ.	7.0 mA	7.0 mA	7.5 mA
Power loss, typ.	3.5 W	3.5 W	6.5 W
Dimensions (W x H x D) in mm	40 x 125 x 120		
Weight, approx.	200 g	200 g	260 g

SM 321 6ES7 321-	7BH00-0AB0 7BH80-0AB0 ¹⁾	1EH01-0AA0
Number of inputs	16	16
Rated load voltage L+/L1		
• Rated value	24 V DC	-
• Acceptable range	20.4 V to 28.8 V	-
Input voltage		
• Rated value	24 V DC	120 V AC
• for "1" signal	15 to 30 V	79 to 132 V
• for "0" signal	-3 to +5 V	0 to 20 V
• Frequency	-	47 to 63 Hz
Isolation (to backplane bus)	Optocoupler	
• in groups of	16	4
Input current		
• for "1" signal	7 mA	6 mA
Power loss	4 W	4.1 W
Dimensions	40 x 125 x 120	

(W x H x D) in mm		
Weight	200 g	225 g

SM 321 6ES7 321-	1EL00-0AA0	1FF01-0AA0 1FF81-0AA0 1)
Number of inputs	32	8
Rated load voltage L+/L1		
• Rated value	-	-
• Acceptable range	-	-
Input voltage		
• Rated value	120 V AC	120 / 230 V AC
• for "1" signal	74 to 132 V	79 to 264 V
• for "0" signal	0 to 20 V	0 to 40 V
• Frequency	47 to 63 Hz	47 to 63 Hz
Isolation (to backplane bus)	Optocoupler	
• in groups of	8	2
Input current		
• for "1" signal	21 mA	6.5 mA (120 V) 11mA (230V)
Power loss	4.0 W	4.9 W
Dimensions (W x H x D) in mm	40 x 125 x 120	
Weight	300 g	240 g

1) with extended temperature range