

SIMATIC S7/PCS7, SM 321 DIGITAL INPUT MODULE, 16 DI, 24V DC, 1 X 40 PIN, CAPABLE OF DIAGNOSTICS, FOR CONTACTS (CONNECTED/ UNCONNECTED), NAMUR SENSOR, 3/4-WIRE-BERO, WITH FLUTTER MONITORING, PULSE LENGTHENING, WIRE BREAK DETECTION, IM153-2 INTERFACE MOD. REQUIRED



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	11 W
Time stamping	
Accuracy	1 ms
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	No
Input characteristic curve in accordance with IEC 61131, type 2	Yes

Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	8.2 V; 8.2V/18V
Input current	
• for signal "1", typ.	10 mA; for NAMUR: 2.1 to 7 mA, for 10k ohm/47k ohm contact: typical 10mA, for 4 wire BEROs: typical 10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	2.5 ms
— at "0" to "1", max.	3.5 ms
— at "1" to "0", min.	2.5 ms
— at "1" to "0", max.	3.5 ms
Cable length	
• shielded, max.	400 m; max. 200m with 8.2 V sensor, max. 400m with 18 V sensor
• unshielded, max.	Not permitted
Interrupts/diagnostics/status information	
Diagnostic functions	Yes
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	Yes
Diagnostic messages	
• Wire-break	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	8
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	600 V DC
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C

• max. 60 °C

Extended ambient conditions

• At cold restart, min. 0 °C

Connection method

required front connector 1x 40-pin

Dimensions

Width 40 mm

Height 125 mm

Depth 120 mm

last modified: 03/24/2017