



SIPLUS S7-300 SM321 16DE 0-1 LEVEL AT ABOUT 11.2V WITH CONFORMAL COATING BASED ON 6ES7321-7BH01-0AB0 . DIGITAL INPUT SM 321, GALVANICALLY ISOLATED, 16 DI, DC 24V, 1 X 20 PIN, PROCESS INTERRUPT, DIAGNOSTICS, FIT FOR ISOCHRON MODE

Figure similar

### Supply voltage

#### Load voltage L+

• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V

### Input current

from load voltage L+ (without load), max.	90 mA
from backplane bus 5 V DC, max.	130 mA

### Power losses

Power loss, typ.	4 W
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### Digital inputs

Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 2	Yes

#### horizontal installation

— up to 60 °C, max.	16
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#### vertical installation

— up to 40 °C, max.	16
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### Input voltage

• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 ... +11.2 V
• for signal "1"	13 to 30V

### Input current

• for signal "1", typ.	7 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— Parameterizable	Yes; 0.1 / 0.5 / 3 / 15 / 20 ms
<b>Cable length</b>	
• shielded, max.	1 000 m
• Unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 2-wire sensor	Yes
— Permissible quiescent current (2-wire sensor), max.	2 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Alarms	Yes
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	Yes; Parameterizable
<b>Diagnostic messages</b>	
• Diagnostic functions	Yes; Parameterizable
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
• between the channels	No
• between the channels, in groups of	16
• between the channels and the backplane bus	Yes; Optocoupler
<b>Permissible potential difference</b>	
between different circuits	75V DC/60V AC
<b>Isolation</b>	
Isolation checked with	500 V DC
<b>Standards, approvals, certificates</b>	
CE mark	Yes
KC approval	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
FM approval	Yes; CofC 3028431

EAC (formerly Gost-R)	Yes
<b>Ambient conditions</b>	
Ambient temperature in operation	
• Min.	0 °C; = Tmin
• max.	60 °C; = Tmax
<b>Extended ambient conditions</b>	
• Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
<b>Relative humidity</b>	
— With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
— against biologically active substances / conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
— against chemically active substances / conformity with EN 60721-3-3	Yes; Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
— against mechanically active substances / conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
<b>Connection method</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	200 g
<b>last modified:</b>	12.03.2015