

SIEMENS

Product data sheet

6ES7321-7BH01-0AB0


SIMATIC S7-300, DIGITAL INPUT SM 321,
GALVANICALLY ISOLATED, 16 DI, DC 24V,
1 X 20 PIN, PROCESS INTERRUPT,
DIAGNOSTICS, FIT FOR ISOCHRON MODE

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
Digital inputs	
Number/binary inputs	16
Input characteristic curve acc. to IEC 61131, Type 2	Yes
Number of simultaneously controllable inputs	
horizontal installation	

up to 40 °C, max.	16
up to 60 °C, max.	16
vertical installation	
up to 40 °C, max.	16
Input voltage	
Type of input voltage	DC
Rated value, DC	24 V
for signal "0"	-30 to +5 V
for signal "1"	13 to 30 V
Input current	
for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
Parameterizable	Yes ; 0.1 / 0.5 / 3 / 15 / 20 ms
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	2 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Interrupts/diagnostics/status information	
Alarms	
Alarms	Yes
Diagnostic alarm	Yes ; Parameterizable
Hardware interrupt	Yes ; Parameterizable
Diagnostic messages	
Diagnostic functions	Yes ; Parameterizable
Diagnostics indication LED	
Group error SF (red)	Yes

Status indicator digital input (green)	Yes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels	No
between the channels, in groups of	16
between the channels and the backplane bus	Yes ; Optocoupler
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weight	
Weight, approx.	200 g
Status	Jul 25, 2012