



SIMATIC S7-300, DIGITAL INPUT SM 321,
OPTICALLY ISOLATED, 16 DI, DC 48-125V,
1 X 20 PIN

Supply voltage	
Load voltage L+	
Rated value (DC)	48 V
permissible range, lower limit (DC)	48 V
permissible range, upper limit (DC)	125 V
Input current	
from backplane bus 5 V DC, max.	40 mA
Power losses	
Power loss, typ.	4.3 W
Digital inputs	
Number/binary inputs	16
Input characteristic curve acc. to IEC 61131, Type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
up to 40 °C, max.	8
up to 60 °C, max.	8 ; 6 to Ue 146 V
vertical installation	
up to 40 °C, max.	8

Input voltage	
Type of input voltage	DC
Rated value, DC	48 V ; 48 to 125 V DC
for signal "0"	-146 to +15 V DC
for signal "1"	30 to 146 V DC
Input current	
for signal "1", typ.	3.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
Parameterizable	No
at "0" to "1", min.	0.1 ms
at "0" to "1", max.	3.5 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.	1 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Alarms	
Alarms	No
Diagnostic alarm	No
Hardware interrupt	No
Diagnostic messages	
Diagnostic functions	No
Diagnostics indication LED	
Group error SF (red)	No
Status indicator digital input (green)	Yes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels	No
between the channels, in groups of	8
between the channels and the backplane bus	Yes ; Optocoupler
Permissible potential difference	

between different circuits	146 V DC / 132 V AC
Isolation	
Isolation checked with	1500 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	Feb 27, 2013