

SIMATIC S7-400, digital input SM 421, isolated 16 DI; UC 120/230V  
Inputs according to IEC1131-2 Type 2



Input current	
from backplane bus 5 V DC, max.	80 mA
Power loss	
Power loss, typ.	12 W
Digital inputs	
Number of digital inputs	16
Number of simultaneously controllable inputs	
• Number of simultaneously controllable inputs	16
Input voltage	
• Type of input voltage	AC/DC
• Rated value (UC)	230 V; 120/230 V UC (47 ... 63 Hz)
• for signal "0"	0 to 40 V AC/ -40 to +40 V DC
• for signal "1"	74 to 264 V AC; 80 to 264 V DC, -80 to -264 V
Input current	
• for signal "0", min.	0 mA; AC: 0 mA; DC: 0 mA
• for signal "0", max. (permissible quiescent current)	6 mA; AC: 6 mA; DC: 2 mA

• for signal "1", typ.	10 mA; at 120 V: 10 mA AC, 1.8 mA DC; at 230 V: 14 mA AC, 2 mA DC
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", max.	20 ms; AC: 20 ms; DC: 15 ms
— at "1" to "0", max.	30 ms; AC: 30 ms; DC: 25 ms
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	5 mA; AC: 5 mA
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	No
Diagnostics indication LED	
• Status indicator digital input (green)	Yes
<b>Potential separation</b>	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes
<b>Isolation</b>	
Isolation tested with	1 500 V AC
<b>Dimensions</b>	
Width	25 mm
Height	290 mm
Depth	210 mm
<b>Weights</b>	
Weight, approx.	650 g
<b>last modified:</b>	06/09/2020