

SIMATIC S7-400,
SM 421 DIGITAL INPUT MODULE,
OPTIC. ISOLATED, 16 DI, 24 - 60V UC,
ALARM, DIAGNOSTICS

Input current	
from backplane bus 5 V DC, max.	150 mA
Power losses	
Power loss, max.	8 W ; 3.5 W (24 V DC); 6.5 W (48 V DC); 8.0 W (60 V DC)
Digital inputs	
Number/binary inputs	16
Number of simultaneously controllable inputs	
all mounting positions	
up to 40 °C, max.	16
up to 60 °C, max.	16
Input voltage	
Type of input voltage	AC/DC
Rated value, UC	24 V ; 24 to 60 V UC
for signal "0"	-6 to +6 V DC/ 0 to 5 V AC
for signal "1"	15 to 72 V DC; -15 to -72 V DC; 15 to 60 V AC
Frequency range	47 to 63 Hz AC / DC
Input current	
for signal "1", typ.	4 mA ; 4 to 10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
Parameterizable	Yes
Rated value	0.5 ms ; 0.5 / 3 / 10 / 20 ms
Cable length	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m ; 600 m: 3, 10, 20 ms; 100 m: 0.5 ms
Encoder	
Connectable encoders	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	0.5 mA ; 0.5 to 2 mA
Interrupts/diagnostics/status information	

Alarms	
Diagnostic alarm	Yes ; Parameterizable
Hardware interrupt	Yes ; Parameterizable
Diagnostic messages	
Diagnostics	Yes ; internal/ external fault
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels, in groups of	1
between the channels and the backplane bus	Yes
Isolation	
Isolation checked with	1500 V AC
Dimensions	
Width	25 mm
Height	290 mm
Depth	210 mm
Weight	
Weight, approx.	600 g
Status	Feb 25, 2013