

SIEMENS

Product data sheet

6ES7421-1FH20-0AA0

SIMATIC S7-400, DIG.INPUT MOD. SM 421,
OPTIC. ISOLATED, 16 DI,
120/230V UC INPUTS PER IEC1131-2 TYPE 2

Input current	
from backplane bus 5 V DC, max.	80 mA
Power losses	
Power loss, max.	12 W
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	230 V ; 120/230 V UC
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
Frequency range	47 to 63 Hz
Input current	
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
Input delay (for rated value of input voltage)	
for standard inputs	
at "0" to "1", max.	20 ms ; AC: 20 ms; DC: 15 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.	5 mA ; AC: 5 mA
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels, in groups of	4
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.	650 g
Status	Jul 17, 2012