



Product data sheet
6ES7221-1BF30-0XB0

SIMATIC S7-1200, DIGITAL INPUT SM 1221, 8DI, 24V DC, SINK/SOURCE INPUT
Supply voltages
Rated value

DC 24 V	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Short-circuit protection	0.0000000000000000E+00

Voltage supply to the transducers

present	Yes
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Current consumption

from backplane bus DC 5 V, max.	105 mA
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Digital inputs

from load voltage L+ (without load), max.	4 mA ; per channel
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Current consumption/power loss

Power loss, typ.	1.5 W
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Connection point

required front connectors	Yes
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Digital inputs

Number of digital inputs	8
	2

Number of simultaneously controllable inputs

[nicht versorgt: TAK_ABP289_001_000]

Number of simultaneously controllable inputs, up to 40 °C	8
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horizontal installation

up to 40 °C, max.	8
up to 50 °C, max.	8

vertical installation

up to 40 °C, max.	8
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Input characteristic curve to IEC 1131, Typ 1	Yes
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Input voltage	
Rated value, DC	24 V
for signal "0"	5 VDC at 1 mA
for signal "1"	15 VDC at 2.5 mA
Input current	
for signal "0", max. (permissible quiescent current)	1 mA
for signal "1", min.	2.5 mA
for signal "1", typ.	4 mA ; Typical
Input delay (for rated value of input voltage)	
for standard inputs	
programmable	Yes ; 0.2, 0.4, 0.8, 1.6, 3.2, 6.4, and 12.8 ms, selectable in groups of four
for interrupt inputs	
programmable	Yes
Cable length	
cable length, shielded, max.	500 m
Cable length unshielded, max.	300 m
Digital outputs	
Number of digital outputs	0
Interrupts/diagnostics/status information	
Alarms	
Alarms	Yes
Diagnostic alarm	Yes
Diagnoses	
Diagnostic functions	Yes
Monitoring the voltage supply to the electronics	Yes
Diagnostics indication LED	
Status indicator digital input (green)	Yes
Isolation	
Galvanic isolation, digital inputs	
between the channels, in groups of	2
Degree of protection	
IP 20	Yes
Standards, approvals, certificates	
CE symbol	Yes

C-TICK	Yes
FM approval	Yes
Mechanics	
Plastic	Yes
Dimensions and weight	
Dimensions and weight	
Width	45 mm
Height	100 mm
Depth	75 mm
Weight	
Weight, approx.	170 g
Status	Aug 31, 2009