



Product data sheet**6ES7221-1BH30-0XB0**

SIMATIC S7-1200, DIGITAL INPUT SM 1221, 16 DI, 24VDC, SINK/SOURCE INPUT

Supply voltages

Rated value

24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V

Power supply to the transmitters

present	Yes
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Current consumption

from backplane bus 5 V DC, max.	130 mA
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Digital inputs

from load voltage L+ (without load), max.	4 mA ; per channel
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Power losses

Power loss, typ.	2.5 W
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Connection method

required front connector	Yes
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Digital inputs

Number of digital inputs	16
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in groups of	4
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Number of simultaneously controllable inputs

all mounting positions

Concurrently controllable inputs, up to 40 °C	16
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horizontal installation

up to 40 °C, max.	16
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up to 50 °C, max.	16
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vertical installation

up to 40 °C, max.	16
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Input characteristic curve acc. to IEC 1131, Type 1	Yes
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Input voltage

Rated value, DC	24 V
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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	
parameterizable	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	
parameterizable	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 supply voltage to the electronics	Yes
Diagnostics indication LED	
Status indicator digital input (green)	Yes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels, in groups of	4
Degree of protection	
IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
C-TICK	Yes
FM approval	Yes

Mechanics

Plastic	Yes
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Dimensions and weight

Dimensions

Width	45 mm
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Height	100 mm
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Depth	75 mm
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Weight

Weight, approx.	210 g
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Status	Jun 15, 2010
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