

# SIEMENS

## Product data sheet

**6ES7221-3BD30-0XB0**


SIMATIC S7-1200, DIGITAL INPUT SB 1221,  
4DI, 24VDC 200KHZ

<b>Input current</b>	
from backplane bus 5 V DC, typ.	50 mA
<b>Output voltage</b>	
<b>Power supply to the transmitters</b>	
Supply current, max.	4 mA ; per channel
<b>Power losses</b>	
Power loss, typ.	1 W
<b>Digital inputs</b>	
Number/binary inputs	4 ; Current-sourcing
In groups of	1
Input characteristic curve acc. to IEC 61131, Type 2	Yes
<b>Number of simultaneously controllable inputs</b>	
all mounting positions	
up to 40 °C, max.	4
<b>Input voltage</b>	

Rated value, DC	24 V
for signal "0"	0 to 5 V
for signal "1"	15 to 30 V
<b>Input current</b>	
for signal "0", max. (permissible quiescent current)	2 mA
for signal "1", min.	5.8 mA
for signal "1", typ.	14 mA
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
Parameterizable	Yes ; 0.2, 0.4, 0.8, 1.6, 3.2, 6.4, and 12.8 ms, selectable in groups of four
at "0" to "1", max.	2.5 $\mu$ s
<b>for interrupt inputs</b>	
Parameterizable	Yes
<b>for counter/technological functions</b>	
Parameterizable	Yes
<b>Cable length</b>	
Cable length, shielded, max.	50 m ; Standard input: 500 m, high-speed counters: 50 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
Alarms	Yes
<b>Diagnostic messages</b>	
Diagnostic functions	Yes
<b>Diagnostics indication LED</b>	
for status of the inputs	Yes
<b>Degree and class of protection</b>	
IP20	Yes
<b>Standards, approvals, certificates</b>	
Marine approval according to Germanischer Lloyd	Yes
<b>Climatic and mechanical conditions for storage and transport</b>	
<b>Climatic conditions for storage and transport</b>	
<b>Free fall</b>	
Drop height, max. (in packaging)	0.3 m ; five times, in dispatch package

<b>Temperature</b>	
Permissible temperature range	-40 °C to +70 °C
<b>Air pressure acc. to IEC 60068-2-13</b>	
Permissible air pressure	1080 to 660 hPa
<b>Mechanical and climatic conditions during operation</b>	
<b>Climatic conditions in operation</b>	
<b>Temperature</b>	
Permissible temperature range	0 °C to 55 °C horizontal installation 0 °C to 45 °C vertical installation
<b>Mechanics/material</b>	
Type of housing (front)	
Plastic	Yes
<b>Dimensions</b>	
Width	38 mm
Height	62 mm
Depth	21 mm
<b>Weight</b>	
Weight, approx.	40 g
Status	Jul 17, 2012