

SIPLUS S7-1200 SM1221 8DI FOR MEDIALE STRESS WITH
CONFORMAL COATING BASED ON 6ES7221-1BF32-0XB0 .
DIGITAL INPUT 8DI, 24V DC, SINK/SOURCE INPUT



Figure similar

Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, max.	105 mA
Digital inputs	
• from load voltage L+ (without load), max.	4 mA; per channel
Output voltage	
Power supply to the transmitters	
• present	Yes
Power loss	
Power loss, typ.	1.5 W
Digital inputs	
Number of digital inputs	8

• in groups of	2
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	8
horizontal installation	
— up to 40 °C, max.	8
— up to 50 °C, max.	8
vertical installation	
— up to 40 °C, max.	8
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	5 V DC at 1 mA
• for signal "1"	15 V DC 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
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms, selectable in groups of four
for interrupt inputs	
— parameterizable	Yes
Cable length	
• shielded, max.	500 m
• unshielded, max.	300 m
Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostic functions	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Monitoring the supply voltage	Yes
Diagnostics indication LED	
• for status of the inputs	Yes
• for maintenance	Yes
Potential separation	
Potential separation digital inputs	

- between the channels, in groups of

2

Degree and class of protection

Degree of protection acc. to EN 60529

- IP20

Yes

Standards, approvals, certificates

CE mark

Yes

Ambient conditions

Free fall

- Fall height, max.

0.3 m; five times, in product package

Ambient temperature during operation

- min.

-20 °C; = Tmin; Startup @ 0 °C

- max.

60 °C; = Tmax

Ambient temperature during storage/transportation

- min.

-40 °C

- max.

70 °C

Altitude during operation relating to sea level

- Ambient air temperature-barometric pressure-altitude

Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) //
Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) //
Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)

Relative humidity

- With condensation, tested in accordance with IEC 60068-2-38, max.

100 %; RH incl. condensation/frost (no commissioning under condensation conditions)

Resistance

Use in stationary industrial systems

— to biologically active substances according to EN 60721-3-3

Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request

— to chemically active substances according to EN 60721-3-3

Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!

— to mechanically active substances according to EN 60721-3-3

Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Connection method

required front connector

Yes

Mechanics/material

Enclosure material (front)

- Plastic

Yes

Dimensions

Width

45 mm

Height

100 mm

Depth

75 mm

Weights

Weight, approx.

170 g

last modified:

11/28/2017