

**Data sheet**  
**SM 221 (221-1BH20)**
**Technical data**

<b>Order no.</b>	<b>221-1BH20</b>
Type	SM 221
<b>General information</b>	
Note	-
Features	16x DI DC 24 V Thereof Counter 1x 32 Bit Up to 100 kHz LED status display
<b>Current consumption/power loss</b>	
Current consumption from backplane bus	85 mA
Power loss	3.5 W
<b>Technical data digital inputs</b>	
Number of inputs	16
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	-
Current consumption from load voltage L+ (without load)	-
Rated value	DC 20.4...28.8 V
Input voltage for signal "0"	DC 0...5 V
Input voltage for signal "1"	DC 15...28.8 V
Input voltage hysteresis	-
Frequency range	-
Input resistance	-
Input current for signal "1"	7 mA
Connection of Two-Wire-BEROs possible	yes
Max. permissible BERO quiescent current	1.5 mA
Input delay of "0" to "1"	3 ms
Input delay of "1" to "0"	3 ms
Number of simultaneously utilizable inputs horizontal configuration	16
Number of simultaneously utilizable inputs vertical configuration	16
Input characteristic curve	IEC 61131-2, type 1
Initial data size	6 Byte
<b>Status information, alarms, diagnostics</b>	
Status display	green LED per channel
Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	none
Group error display	none

Channel error display	none
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**Isolation**

Between channels	-
Between channels of groups to	16
Between channels and backplane bus	yes
Insulation tested with	DC 500 V

**Datasizes**

Input bytes	6
Output bytes	6
Parameter bytes	5
Diagnostic bytes	0

**Housing**

Material	PPE / PA 6.6
Mounting	Profile rail 35 mm

**Mechanical data**

Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm
Net weight	90 g
Weight including accessories	-
Gross weight	-

**Environmental conditions**

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

**Certifications**

UL certification	yes
KC certification	-