



Figure similar

\*\*\*Spare part\*\*\* SIMATIC S7-200, Digital input EM 221, only for S7-22X CPU, 16 DI, 24 V DC, sinking-sourcing

Input current	
from backplane bus 5 V DC, max.	70 mA
Power loss	
Power loss, typ.	3 W
Digital inputs	
Number of digital inputs	16
Sourcing/sinking input	Yes
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> <li>Type of input voltage</li> <li>Rated value (DC)</li> <li>for signal "0"</li> <li>for signal "1"</li> </ul>	DC 24 V 0 to 5 V +15 to +30 V
Input current	
<ul style="list-style-type: none"> <li>for signal "1", typ.</li> </ul>	4 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	4.5 ms
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	500 m 300 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> <li>2-wire sensor</li> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	Yes 1 mA
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>Potential separation digital inputs</li> <li>between the channels, in groups of</li> </ul>	Yes; Optocoupler 4
Isolation	
Isolation tested with	500V AC for 1 minute
Connection method	
Plug-in I/O terminals	Yes
Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm
Weights	

Weight, approx. 160 g

**Classifications**

	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

General Product Approval For use in hazardous locations



EG-Konf.

[China RoHS](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)



ATEX

[EM](#)

**Maritime application**



[CCS \(China Classification Society\)](#)

last modified:

8/24/2025