



\*\*\* spare part \*\*\* SIMATIC S7-200, EM253 positioning expansion module, 200 kHz, for controlling stepper motors or servo drives, open-loop control, programming via Micro/WIN

Supply voltage	
permissible range, lower limit (DC)	11 V
permissible range, upper limit (DC)	30 V
Input current	
from supply voltage L+, max.	300 mA; from 12 V DC, 130 mA from 24 V DC
from backplane bus 5 V DC, max.	190 mA
Power loss	
Power loss, typ.	2.5 W
Hardware configuration	
Number of modules per CPU	max. 5 with CPU 226/226XM, max. 3 with CPU 224, max. 1 with CPU 222
Digital inputs	
Number of digital inputs	5; P-reading
Functions	Stop (STP), reference point switch (RPS), upper limit switch (LMT+), lower limit switch (LMT-), zero point (ZP)
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>for signal "0"</li> </ul>	STP, RPS, LMT+, LMT- DC 5 V; ZP DC 1 V
<ul style="list-style-type: none"> <li>for signal "1"</li> </ul>	STP, RPS, LMT+, LMT- DC 15 V; ZP DC 3 V
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; STP, RPS, LMT+, LMT- 0.2 to 12.8 ms; ZP min 2 μs
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	100 m; STP, RPS, LMT+, LMT- 100 m, ZP 10 m
<ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>	30 m; STP, RPS, LMT+, LMT- 30 m, ZP not recommended
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> <li>2-wire sensor</li> </ul>	Yes
— permissible quiescent current (2-wire sensor), max.	1 mA
Drive interface	
Number of drive interfaces	4; optionally RS 422 / 485 or 5 V DC
Stepper drive	
<ul style="list-style-type: none"> <li>Differential output voltage, min.</li> </ul>	2.8 V; RL = 200 ohms
<ul style="list-style-type: none"> <li>Output current, max.</li> </ul>	50 mA
<ul style="list-style-type: none"> <li>Pulse frequency</li> </ul>	200 kHz
<ul style="list-style-type: none"> <li>Cable length, shielded, max.</li> </ul>	10 m
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>between the channels</li> </ul>	Yes

- between the channels, in groups of

1 (STP, RPS, ZP), 2 (LMT-, LMT+)

**Permissible potential difference**

between different circuits 500 V AC

**Dimensions**

Width 71.2 mm  
 Height 80 mm  
 Depth 62 mm

**Weights**

Weight, approx. 190 g

**Classifications**

	Version	Classification
eClass	14	27-24-22-05
eClass	12	27-24-22-05
eClass	9.1	27-24-22-05
eClass	9	27-24-22-05
eClass	8	27-24-22-05
eClass	7.1	27-24-22-05
eClass	6	27-24-22-05
ETIM	10	EC001422
ETIM	9	EC001422
ETIM	8	EC001422
ETIM	7	EC001422
IDEA	4	3567
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

General Product Approval

For use in hazardous locations

[Miscellaneous](#)



[China RoHS](#)



[EM](#)

**Maritime application**



**Maritime application**

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

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