



SIMATIC DP, Electronics module for ET 200S, 1 SSI 25 bit/1 MHz 15 mm width, Module for connection of absolute value encoders with SSI Synchronous Serial Interface with DI and comparison value with clock synchronization

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	40 mA
from backplane bus 3.3 V DC, max.	10 mA
Encoder supply	
24 V encoder supply	
• 24 V	Yes
• Short-circuit protection	Yes
• Output current, max.	500 mA
Absolute encoder (SSI) encoder supply	
• Absolute encoder (SSI)	Yes
• Type of output voltage	L+ (-0.8 V)
• Short-circuit protection	Yes
• Output current, max.	500 mA
Power loss	
Power loss, typ.	1 W
Hardware configuration	
Module exchange	
• Module exchange during operation of the IM-DP	Yes
• Module exchange under process voltage	Yes
Digital inputs	
Number of digital inputs	1
Input voltage	
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	300 μs
— at "1" to "0", max.	300 μs
Cable length	
• shielded, max.	50 m

Encoder	
Number of connectable encoders, max.	1
Connectable encoders	
<ul style="list-style-type: none"> <li>• Absolute encoder (SSI)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• 2-wire sensor</li> </ul>	Yes; Type 2
Encoder signals, absolute encoder (SSI)	
<ul style="list-style-type: none"> <li>• Input signal</li> </ul>	to RS-422
<ul style="list-style-type: none"> <li>• Telegram length, parameterizable</li> </ul>	13, 14, 16, 21, 24 & 25 bit
<ul style="list-style-type: none"> <li>• Binary code</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Gray code</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Cable length, shielded, max.</li> </ul>	320 m; At 125 kHz
<ul style="list-style-type: none"> <li>• Monoflop time</li> </ul>	16/32/48/64 $\mu$ s
Interrupts/diagnostics/status information	
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Status indicator digital input (green)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Status indicator forward counting (green)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Status indicator backward counting (green)</li> </ul>	Yes
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>• Potential separation digital inputs</li> </ul>	No; same potential with L+ and SSI
Potential separation counter	
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Between the channels and load voltage L+</li> </ul>	No
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	40 g
<b>last modified:</b>	1/16/2021 