

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
<b>Power loss</b>	
Power loss, typ.	1 W
<b>Hardware configuration</b>	
Module exchange	
• Module exchange during operation of the IM-DP	Yes
• Module exchange under process voltage	Yes
<b>Digital inputs</b>	
Number of digital inputs	1
<b>Input voltage</b>	
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
<b>Input current</b>	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	9 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", max.	300 µs
— at "1" to "0", max.	300 µs
<b>Cable length</b>	
• shielded, max.	50 m
<b>Encoder</b>	
Number of connectable encoders, max.	1
<b>Connectable encoders</b>	
• Absolute encoder (SSI)	Yes
• 2-wire sensor	Yes; Type 2
<b>Encoder signals, absolute encoder (SSI)</b>	
• Input signal	to RS-422
• Telegram length, parameterizable	13, 14, 16, 21, 24 & 25 bit
• Binary code	Yes
• Gray code	Yes
• Cable length, shielded, max.	320 m; At 125 kHz
• Monoflop time	16/32/48/64 µs
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
• Status indicator forward counting (green)	Yes

• Status indicator backward counting (green)	Yes
<b>Potential separation</b>	
Potential separation digital inputs	
• Potential separation digital inputs	No; same potential with L+ and SSI
<b>Potential separation counter</b>	
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	No
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weights</b>	
Weight, approx.	40 g
<b>last modified:</b>	05/13/2020