



SIMATIC DP, ELECTRONIC MODULE ET200S: 2AI HIGH SPEED I-2WIRE, 0 - 20MA, 4 - 20MA, 15BIT, 15 MM WIDTH, FOR 2-WIRE TRANSDUCER, CYCLE TIME OF THE MOD.: 0.1MS, WITH LED SF (GROUP FAULT)

Figure similar

### Supply voltage

#### Load voltage L+

• Rated value (DC)	24 V
• short-circuit protection	Yes
• Reverse polarity protection	Yes

### Input current

from load voltage L+ (without load), max.	225 mA
from backplane bus 3.3 V DC, max.	10 mA

### Output voltage

#### Power supply to the transmitters

• present	Yes
• short-circuit proof	Yes

### Power losses

Power loss, typ.	2.5 W
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### Address area

#### Address space per module

• Address space per module, max.	4 byte
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### Analog inputs

Number of analog inputs	2
Cycle time (all channels) max.	0.25 ms

#### Input ranges

• Voltage	No
• Current	Yes

• Thermocouple	No
• Resistance thermometer	No
• Resistance	No
<b>Input ranges (rated values), currents</b>	
• 0 to 20 mA	Yes
• Input resistance (0 to 20 mA)	106 Ω
• 4 mA to 20 mA	Yes
<b>Cable length</b>	
• shielded, max.	200 m
<b>Analog value creation</b>	
<b>Integration and conversion time/resolution per channel</b>	
• Resolution with overrange (bit including sign), max.	16 bit
<b>Smoothing of measured values</b>	
• Parameterizable	Yes
• Step: None	Yes; 1
• Step: low	Yes; 4
• Step: Medium	Yes; 16
• Step: High	Yes; 32
<b>Encoder</b>	
<b>Connection of signal encoders</b>	
• for current measurement as 2-wire transducer	Yes
<b>Errors/accuracies</b>	
Linearity error (relative to input range), (+/-)	0.03 %
Temperature error (relative to input range), (+/-)	0.01 %/K
Crosstalk between the inputs, min.	50 dB
Repeat accuracy in steady state at 25 °C (relative to input area), (+/-)	0.1 %
<b>Operational limit in overall temperature range</b>	
• Current, relative to input area, (+/-)	0.3 %
<b>Basic error limit (operational limit at 25 °C)</b>	
• Current, relative to input area, (+/-)	0.2 %
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Hardware interrupt	Yes
<b>Diagnostic messages</b>	
• Diagnostic functions	Yes
• Wire break	Yes; at 4 to 20 mA

- Group error Yes
- Overflow/underflow Yes

<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes

<b>Parameter</b>	
Diagnosis: wire break	At 4 to 20 mA
Measurement type/range	4 to 20 mA, 0 to 20 mA
Interference frequency suppression	No
Group diagnostics	1
Overflow/underflow	1

<b>Galvanic isolation</b>	
<b>Galvanic isolation analog inputs</b>	
• between the channels	No
• between the channels and the backplane bus	Yes
• between the channels and the load voltage L+	Yes

<b>Permissible potential difference</b>	
between MANA and M internally (UISO)	75V DC/60V AC

<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm

**last modified:** 12.03.2015