

SIMATIC DP, Electronics module ET 200S 4AI standard I-2-wire, 4-20 mA; 13 bit, 15 mm width, for 2-wire transducer Cycle time 40 ms/module with SF LED (group fault)



General information	
Product function	
• Isochronous mode	No
Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	125 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
• present	Yes
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	

- Address space per module, max. 8 byte

Analog inputs

Number of analog inputs	4
permissible input current for current input (destruction limit), max.	30 mA; limited electronically
Cycle time (all channels) max.	40 ms; 33 to 40 ms
Input ranges (rated values), currents	
• 4 mA to 20 mA	Yes; Into 25 Ohm
Cable length	
• shielded, max.	200 m

Analog value generation for the inputs

Measurement principle	integrating
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	13 bit; 4 to 20 mA: 13 bit
• Integration time, parameterizable	Yes
• Integration time (ms)	16,67 / 20 ms
• Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz
Smoothing of measured values	
• parameterizable	Yes; in 4 stages
• Step: None	Yes; 1x cycle time
• Step: low	Yes; 4x cycle time
• Step: Medium	Yes; 16x cycle time
• Step: High	Yes; 32x cycle time

Errors/accuracies

Operational error limit in overall temperature range	
• Current, relative to input range, (+/-)	0.4 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to input range, (+/-)	0.3 %

Interrupts/diagnostics/status information

Diagnoses	
• Wire-break	Yes; Measuring range 1 to 5 V only
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter

Remark	7 byte
Diagnostics wire break	1
Measurement type/range	1

Group diagnostics	1
Overflow/underflow	1

Potential separation

Potential separation analog inputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	No

Isolation

Isolation tested with	500 V DC
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Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	40 g
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last modified: 12/09/2020