



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)

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 loss

Power loss, typ.	2.5 W
------------------	-------

Address area

Address space per module	
• Address space per module, max.	4 byte
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
Input ranges (rated values), currents	
• 0 to 20 mA	Yes
• Input resistance (0 to 20 mA)	106 Ω
• 4 to 20 mA	Yes
Cable length	
• Cable length, shielded, max.	200 m
Analog value generation	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit
Smoothing of measured values	
• parameterizable	Yes
• Step: None	Yes; 1
• Step: low	Yes; 4
• Step: Medium	Yes; 16
• Step: High	Yes; 32
Encoder	
Connection of signal encoders	
• for current measurement as 2-wire transducer	Yes
Errors/accuracies	
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 %
Operational error limit in overall temperature range	

• Current, relative to input area, (+/-)	0.3 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to input area, (+/-)	0.2 %

Isochronous mode	
Isochronous mode (application synchronized up to terminal)	Yes

Interrupts/diagnostics/status information	
Alarms	
• Hardware interrupt	Yes
Diagnostic messages	
• Diagnostic functions	Yes
• Wire-break	Yes; at 4 to 20 mA
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter	
Diagnostics 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

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

Permissible potential difference	
between MANA and M internally (UISO)	75 VDC / 60 VAC

Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
last modified:	31.07.2014