



SIMATIC DP, Electronics module 2 AI I High Feature for ET 200S, 15 mm width, Cycle time per module: 0.5 ms, +/-20mA; 15 bit+sign, 4.. 20mA; 15 bit, Operational limit +/-0.1% with SF LED (group fault)

General information	
Product function	
<ul style="list-style-type: none"> <li>• Isochronous mode</li> </ul>	Yes
Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>• Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• Reverse polarity protection</li> </ul>	Yes
Input current	
from load voltage L+ (without load), max.	48 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
<ul style="list-style-type: none"> <li>• present</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• short-circuit proof</li> </ul>	Yes
Power loss	
Power loss, typ.	1.2 W
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>• Address space per module, max.</li> </ul>	4 byte
Analog inputs	
Number of analog inputs	2
permissible input current for current input (destruction limit), max.	50 mA
Cycle time (all channels) max.	0.5 ms; 0.5 ms for 2 channels without noise suppression, 18 / 21 ms per channel with noise suppression
Input ranges (rated values), currents	
<ul style="list-style-type: none"> <li>• -20 mA to +20 mA</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• 4 mA to 20 mA</li> </ul>	Yes
Cable length	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	200 m
Analog value generation for the inputs	
Measurement principle	Sigma Delta
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> <li>• Resolution with overrange (bit including sign), max.</li> </ul>	16 bit
<ul style="list-style-type: none"> <li>• Interference voltage suppression for interference frequency f1 in Hz</li> </ul>	60 / 50 Hz / no
<ul style="list-style-type: none"> <li>• Conversion time (per channel)</li> </ul>	0.04 ms; Without noise suppression 17/20 ms per channel with error

Smoothing of measured values	
• parameterizable	Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time
• Step: None	Yes; 1x
• Step: low	Yes; 4x
• Step: Medium	Yes; 16x
• Step: High	Yes; 32x
Errors/accuracies	
Operational error limit in overall temperature range	
• Current, relative to input range, (+/-)	0.1 %; 0.2% without interference frequency suppression
Basic error limit (operational limit at 25 °C)	
• Current, relative to input range, (+/-)	0.05 %; 0.1% without interference frequency suppression
Interrupts/diagnostics/status information	
Alarms	
• Hardware interrupt	Yes
Diagnoses	
• Wire-break	Yes; Measuring range 4 to 20 mA only
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Parameter	
Remark	12 bytes, 4 bytes in compatibility mode
Diagnostics wire break	Disable / enable
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
Potential separation	
Potential separation analog inputs	
• between the channels	No; however, increased permissible potential difference between the inputs.
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	45 g
<b>last modified:</b>	1/16/2021 