

SIMATIC DP, ELECTRONIC MODULE ET 200S: 2AI HIGH SPEED I-4WIRE 4 - 20mA; 16BIT, 15 MM WIDTH, FOR 4-WIRE TRANSDUCER, CYCLE TIME OF MODULE: 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.	80 mA; without load
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
• present	Yes
• short-circuit proof	Yes
Encoder supply	
Number of outputs	2
Type of output voltage	24 V
Short-circuit protection	Yes

<b>Output current</b>	
<ul style="list-style-type: none"> <li>Rated value</li> </ul>	80 mA; Per channel
<ul style="list-style-type: none"> <li>permissible range</li> </ul>	0 to 90 mA
<b>Power loss</b>	
Power loss, typ.	1.9 W
<b>Address area</b>	
Address space per module	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	4 byte
<b>Analog inputs</b>	
Number of analog inputs	2
permissible input current for current input (destruction limit), max.	30 mA
Cycle time (all channels) max.	250 $\mu$ s
<b>Input ranges</b>	
<ul style="list-style-type: none"> <li>Voltage</li> </ul>	No
<ul style="list-style-type: none"> <li>Current</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Thermocouple</li> </ul>	No
<ul style="list-style-type: none"> <li>Resistance thermometer</li> </ul>	No
<ul style="list-style-type: none"> <li>Resistance</li> </ul>	No
<b>Input ranges (rated values), currents</b>	
<ul style="list-style-type: none"> <li>0 to 20 mA</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Input resistance (0 to 20 mA)</li> </ul>	106 $\Omega$
<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
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	200 m
<b>Analog value generation for the inputs</b>	
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
<b>Smoothing of measured values</b>	
<ul style="list-style-type: none"> <li>parameterizable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Step: None</li> </ul>	Yes; 1 x cycle time
<ul style="list-style-type: none"> <li>Step: low</li> </ul>	Yes; 4 x cycle time
<ul style="list-style-type: none"> <li>Step: Medium</li> </ul>	Yes; 16 x cycle time
<ul style="list-style-type: none"> <li>Step: High</li> </ul>	Yes; 32 x cycle time
<b>Encoder</b>	
Connection of signal encoders	
<ul style="list-style-type: none"> <li>for current measurement as 2-wire transducer</li> </ul>	No
<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 range), (+/-)	0.1 %
<b>Operational error limit in overall temperature range</b>	
• Current, relative to input range, (+/-)	0.3 %
<b>Basic error limit (operational limit at 25 °C)</b>	
• Current, relative to input range, (+/-)	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 information readable	Yes
• Wire-break	Yes; Measuring range 4 to 20 mA only
• Group error	Yes
• Overflow/underflow	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
<b>Parameter</b>	
Diagnostics wire break	At 4 to 20 mA
Measurement type/range	4 to 20 mA, 0 to 20 mA, +/-20 mA
Group diagnostics	Yes
Overflow/underflow	Yes
<b>Potential separation</b>	
<b>Potential separation analog inputs</b>	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
<b>Permissible potential difference</b>	
between MANA and M internally (UIISO)	75 V DC/60 V AC
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weights</b>	
Weight, approx.	45 g

last modified:

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