



SIMATIC DP, Electronics module ET 200S: 2 AI High Speed U, 15 bit, 15 mm width, Cycle time of module: 0.1 ms, with SF LED (group fault)

Figure similar

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> <li>• Reverse polarity protection</li> </ul>	24 V Yes
Input current	
from load voltage L+ (without load), max.	130 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	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 voltage for voltage input (destruction limit), max.	35 V; Permanent
Cycle time (all channels) max.	250 $\mu$ s
Input ranges (rated values), voltages	
<ul style="list-style-type: none"> <li>• 1 V to 5 V — Input resistance (1 V to 5 V)</li> <li>• -10 V to +10 V — Input resistance (-10 V to +10 V)</li> <li>• -2.5 V to +2.5 V — Input resistance (-2.5 V to +2.5 V)</li> <li>• -5 V to +5 V — Input resistance (-5 V to +5 V)</li> </ul>	Yes 120 k $\Omega$ Yes 120 k $\Omega$ Yes 120 k $\Omega$ Yes 120 k $\Omega$
Cable length	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	200 m
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> <li>• Resolution with overrange (bit including sign), max.</li> <li>• Conversion time (per channel)</li> </ul>	16 bit; 15 bit: 1 to 5 V; $\pm$ 2.5 V; 16 bit: $\pm$ 10 V; $\pm$ 5 V 15 $\mu$ s
Smoothing of measured values	

<ul style="list-style-type: none"> <li>• parameterizable</li> <li>• Step: None</li> <li>• Step: low</li> <li>• Step: Medium</li> <li>• Step: High</li> </ul>	Yes Yes; 1x cycle time Yes; 4x cycle time Yes; 16x cycle time Yes; 32x cycle time
<b>Encoder</b>	
Connection of signal encoders	
<ul style="list-style-type: none"> <li>• for voltage measurement</li> </ul>	Yes
<b>Errors/accuracies</b>	
Operational error limit in overall temperature range	
<ul style="list-style-type: none"> <li>• Voltage, relative to input range, (+/-)</li> </ul>	0.3 %
Basic error limit (operational limit at 25 °C)	
<ul style="list-style-type: none"> <li>• Voltage, relative to input range, (+/-)</li> </ul>	0.2 %
<b>Interrupts/diagnostics/status information</b>	
Alarms	
<ul style="list-style-type: none"> <li>• Hardware interrupt</li> </ul>	Yes
Diagnoses	
<ul style="list-style-type: none"> <li>• Diagnostic information readable</li> <li>• Wire-break</li> <li>• Group error</li> <li>• Overflow/underflow</li> </ul>	Yes Yes; at 1 to 5 V Yes Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
<b>Parameter</b>	
Remark	12 bytes, 4 bytes in compatibility mode
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
<b>Potential separation</b>	
Potential separation analog inputs	
<ul style="list-style-type: none"> <li>• between the channels</li> <li>• between the channels and backplane bus</li> <li>• Between the channels and load voltage L+</li> </ul>	No Yes Yes
<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm
<b>Weights</b>	
Weight, approx.	40 g
<b>last modified:</b>	1/16/2021 