



SIMATIC DP, Electronics module for ET 200S, 2 AO U High Speed, 15 mm width, +/-10 V, +/-5 V, 1.. 5V; 16 bit, Cycle time: 0.1ms 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> <li>• Reverse polarity protection</li> </ul>	24 V; From power module 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.	2.2 W
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>• Address space per module, max.</li> </ul>	4 byte
Analog outputs	
Number of analog outputs	2
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	25 mA
Cycle time (all channels) max.	0.25 ms
Output ranges, voltage	
<ul style="list-style-type: none"> <li>• 1 V to 5 V</li> <li>• -5 V to +5 V</li> <li>• -10 V to +10 V</li> </ul>	Yes Yes Yes
Connection of actuators	
<ul style="list-style-type: none"> <li>• for voltage output two-wire connection</li> <li>• for voltage output four-wire connection</li> </ul>	Yes; Without compensation of the line resistances Yes
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> <li>• with voltage outputs, min.</li> <li>• with voltage outputs, capacitive load, max.</li> </ul>	1 kΩ 1 μF; 0.1 μF for Twa=0.1 ms
Destruction limits against externally applied voltages and currents	
<ul style="list-style-type: none"> <li>• Voltages at the outputs towards MANA</li> <li>• Current, max.</li> </ul>	15 V; Max. 15 V for max. 5 hours, 75 V for max. 1 s 30 mA; DC
Cable length	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	200 m; Max. 20 m for TWA 100 μs
Analog value generation for the outputs	
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; 1 to 5 V: 14 bit, ±10 V: 15 bit + sign, ±5 V: 14 bit + sign
Settling time	

• for resistive load	0.05 ms
• for capacitive load	0.05 ms
• for inductive load	0.05 ms
<b>Errors/accuracies</b>	
Operational error limit in overall temperature range	
• Voltage, relative to output range, (+/-)	0.2 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output range, (+/-)	0.01 %
<b>Interrupts/diagnostics/status information</b>	
Diagnoses	
• Diagnostic information readable	Yes
• Wire-break	No
• Short-circuit	Yes
• Group error	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
<b>Parameter</b>	
Remark	7 byte
Diagnostics short-circuit	Disable / enable
Group diagnostics	Disable / enable
Response to CPU/master STOP	Output current and de-energized/substitute a value/keep last value
<b>Potential separation</b>	
Potential separation analog outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	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 