

SIMATIC DP, Electronics module 2 AO U High Feature for ET 200S, 15 mm width, Cycle time per module: 0.5 ms, +/-10V; 15 bit+sign, 1..5V; 15 bit, Operational limit +/-0.07% with SF LED (group fault)



### Supply voltage

#### Load voltage L+

- |                               |      |
|-------------------------------|------|
| • Rated value (DC)            | 24 V |
| • Reverse polarity protection | Yes  |

### Input current

- |                                           |       |
|-------------------------------------------|-------|
| from load voltage L+ (without load), max. | 80 mA |
| from backplane bus 3.3 V DC, max.         | 10 mA |

### Power loss

- |                  |       |
|------------------|-------|
| Power loss, max. | 1.2 W |
|------------------|-------|

### Address area

#### Address space per module

- |                                  |        |
|----------------------------------|--------|
| • Address space per module, max. | 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.              | 0.5 ms; At max. 0.5 $\mu$ F |

<b>Output ranges, voltage</b>	
• 1 V to 5 V	Yes
• -5 V to +5 V	Yes
• -10 V to +10 V	Yes
<b>Connection of actuators</b>	
• for voltage output two-wire connection	Yes
• for voltage output four-wire connection	Yes
<b>Load impedance (in rated range of output)</b>	
• with voltage outputs, min.	1 k $\Omega$
• with voltage outputs, capacitive load, max.	0.5 $\mu$ F
<b>Destruction limits against externally applied voltages and currents</b>	
• Voltages at the outputs towards MANA	15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20)
<b>Cable length</b>	
• shielded, max.	200 m; 100 m if Twa < 2 ms
<b>Analog value generation for the outputs</b>	
<b>Integration and conversion time/resolution per channel</b>	
• Resolution with overrange (bit including sign), max.	16 bit; 15 bit + sign
<b>Settling time</b>	
• for resistive load	0.2 ms
• for capacitive load	0.5 ms; At max. 0.5 $\mu$ F
• for inductive load	0.5 ms
<b>Errors/accuracies</b>	
<b>Operational error limit in overall temperature range</b>	
• Voltage, relative to output range, (+/-)	0.1 %
<b>Basic error limit (operational limit at 25 °C)</b>	
• Voltage, relative to output range, (+/-)	0.05 %
<b>Interrupts/diagnostics/status information</b>	
Substitute values connectable	Yes
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
• Short-circuit	Yes
• Group error	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
<b>Parameter</b>	
Remark	7 byte
Diagnostics short-circuit	Disable / enable
Output type/range	deactivated / 1 to 5 V / $\pm$ 10 V / $\pm$ 5 V
Group diagnostics	Disable / enable

Response to CPU/master STOP	Output current and de-energized/substitute a value/keep last value
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### Potential separation

Potential separation analog outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes

### Isolation

Isolation tested with	500 V DC
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### Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

### Weights

Weight, approx.	40 g
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**last modified:** 11/25/2019