



SIMATIC DP, ELECTRONIC MODULE ET 200S: 2 AI HIGH SPEED U, 15 BIT, 15 MM WIDE, CYCLE TIME OF MODULE: 0.1MS, WITH LED SF (GROUP FAULT)

Figure similar

### 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 losses

- |                  |       |
|------------------|-------|
| Power loss, typ. | 1.9 W |
|------------------|-------|

### Address area

#### Address space per module

- |                                  |        |
|----------------------------------|--------|
| • Address space per module, max. | 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

- |                          |     |
|--------------------------|-----|
| • Voltage                | Yes |
| • Current                | No  |
| • Thermocouple           | No  |
| • Resistance thermometer | No  |
| • Resistance             | No  |

Input ranges (rated values), voltages	
• 1 V to 5 V	Yes
• Input resistance (1 V to 5 V)	120 kΩ
• -10 V to +10 V	Yes
• Input resistance (-10 V to +10 V)	120 kΩ
• -2.5 V to +2.5 V	Yes
• Input resistance (-2.5 V to +2.5 V)	120 kΩ
• -5 V to +5 V	Yes
• Input resistance (-5 V to +5 V)	120 kΩ
Cable length	
• shielded, max.	200 m
Analog value creation	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit; 15 bits: 1 to 5 V; +/-2.5 V; 16 bits: +/-10 V; +/-5 V
Smoothing of measured values	
• Parameterizable	Yes
• Step: None	Yes; 1 x cycle time
• Step: low	Yes; 4 x cycle time
• Step: Medium	Yes; 16 x cycle time
• Step: High	Yes; 32 x cycle time
Encoder	
Connection of signal encoders	
• for voltage measurement	Yes
Errors/accuracies	
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 area), (+/-)	0.1 %
Operational limit in overall temperature range	
• Voltage, relative to input area, (+/-)	0.3 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input area, (+/-)	0.2 %
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Interrupts/diagnostics/status information	
Alarms	
• Hardware interrupt	Yes
Diagnostic messages	

- Diagnostic functions
- Diagnostic information readable
- Wire break
- Group error
- Overflow/underflow

Yes  
 Yes  
 Yes; at 1 to 5 V  
 Yes  
 Yes

<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes

<b>Parameter</b>	
Remark	12 bytes, 4 bytes in compatibility mode
Measurement type/range	Deactivated / +/-5 V / 1 to 5 V / +/-10 V / +/-2.5 V
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable

<b>Galvanic isolation</b>	
<b>Galvanic isolation analog inputs</b>	
• between the channels	No
• between the channels and the backplane bus	Yes
• between the channels and the load voltage L+	Yes

<b>Isolation</b>	
Isolation checked with	500 V DC

<b>Dimensions</b>	
Width	15 mm
Height	81 mm
Depth	52 mm

<b>Weights</b>	
Weight, approx.	45 g
<b>last modified:</b>	12.03.2015