

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

Supply voltage

Load voltage L+

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

- | | |
|----------------------------------|--------|
| • 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 μ s
Input ranges (rated values), voltages	
• 1 V to 5 V	Yes
— Input resistance (1 V to 5 V)	120 k Ω
• -10 V to +10 V	Yes
— Input resistance (-10 V to +10 V)	120 k Ω
• -2.5 V to +2.5 V	Yes
— Input resistance (-2.5 V to +2.5 V)	120 k Ω
• -5 V to +5 V	Yes
— Input resistance (-5 V to +5 V)	120 k Ω
Cable length	
• shielded, max.	200 m
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit; 15 bit: 1 to 5 V; \pm 2.5 V; 16 bit: \pm 10 V; \pm 5 V
• Conversion time (per channel)	15 μ s
Encoder	
Connection of signal encoders	
• for voltage measurement	Yes
Errors/accuracies	
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	0.3 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input range, (+/-)	0.2 %
Interrupts/diagnostics/status information	
Alarms	
• Hardware interrupt	Yes
Diagnostic messages	
• Diagnostic information readable	Yes
• Wire-break	Yes; at 1 to 5 V
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Parameter	
Remark	12 bytes, 4 bytes in compatibility mode
Measurement type/range	Deactivated / \pm 5 V / 1 to 5 V / \pm 10 V / \pm 2.5 V
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable

Potential separation

Potential separation analog inputs

- | | |
|--|-----|
| • 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:	06/12/2020
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