




SIMATIC DP, Electronics module ET 200S 4AI standard I-2-wire, 4-20 mA; 13 bit, 15 mm width, for 2-wire transducer Cycle time 40 ms/module with SF LED (group fault)

| General information | |
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| Product function | |
| <ul style="list-style-type: none"> • Isochronous mode | No |
| Supply voltage | |
| Load voltage L+ | |
| <ul style="list-style-type: none"> • Rated value (DC) • Reverse polarity protection | 24 V; From power module Yes |
| Input current | |
| from load voltage L+ (without load), max. | 125 mA |
| from backplane bus 3.3 V DC, max. | 10 mA |
| Power loss | |
| Power loss, typ. | 0.6 W |
| Address area | |
| Address space per module | |
| <ul style="list-style-type: none"> • Address space per module, max. | 8 byte |
| Analog inputs | |
| Number of analog inputs | 4 |
| permissible input current for current input (destruction limit), max. | 30 mA; limited electronically |
| Cycle time (all channels) max. | 40 ms; 33 to 40 ms |
| Input ranges (rated values), currents | |
| <ul style="list-style-type: none"> • 4 mA to 20 mA | Yes; Into 25 Ohm |
| Cable length | |
| <ul style="list-style-type: none"> • shielded, max. | 200 m |
| Analog value generation for the inputs | |
| Measurement principle | integrating |
| Integration and conversion time/resolution per channel | |
| <ul style="list-style-type: none"> • Resolution with overrange (bit including sign), max. • Integration time, parameterizable • Integration time (ms) • Interference voltage suppression for interference frequency f1 in Hz | 13 bit; 4 to 20 mA: 13 bit Yes 16,67 / 20 ms 50 / 60 Hz |
| Smoothing of measured values | |
| <ul style="list-style-type: none"> • parameterizable • Step: None • Step: low • Step: Medium • Step: High | Yes; in 4 stages Yes; 1x cycle time Yes; 4x cycle time Yes; 16x cycle time Yes; 32x cycle time |
| Errors/accuracies | |

| | |
|---|---|
| Operational error limit in overall temperature range | |
| • Current, relative to input range, (+/-) | 0.4 % |
| Basic error limit (operational limit at 25 °C) | |
| • Current, relative to input range, (+/-) | 0.3 % |
| Interrupts/diagnostics/status information | |
| Diagnoses | |
| • Wire-break | Yes; Measuring range 1 to 5 V only |
| • Group error | Yes |
| • Overflow/underflow | Yes |
| Diagnostics indication LED | |
| • Group error SF (red) | Yes |
| Parameter | |
| Remark | 7 byte |
| Diagnostics wire break | 1 |
| Group diagnostics | 1 |
| Overflow/underflow | 1 |
| Potential separation | |
| Potential separation analog inputs | |
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| • Between the channels and load voltage L+ | No |
| Isolation | |
| Isolation tested with | 500 V DC |
| Dimensions | |
| Width | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |
| Weights | |
| Weight, approx. | 40 g |
| last modified: | 7/28/2021  |