

SIMATIC DP, Electronics module ET 200S: 2AI High Speed I-4WIRE
 4-20 mA; 16 bit, 15 mm width, for 4-wire transmitter, Cycle time of
 module: 0.1 ms, with SF LED (group fault)



Figure similar

| Supply voltage | |
|---|---------------------|
| Load voltage L+ | |
| • Rated value (DC) | 24 V |
| • Short-circuit protection | Yes |
| • Reverse polarity protection | Yes |
| Input current | |
| from load voltage L+ (without load), max. | 80 mA; without load |
| from backplane bus 3.3 V DC, max. | 10 mA |
| Output voltage | |
| Power supply to the transmitters | |
| • present | Yes |
| • short-circuit proof | Yes |
| Encoder supply | |
| Number of outputs | 2 |
| Type of output voltage | 24 V |
| Short-circuit protection | Yes |

| Output current | |
|----------------------------------|--------------------|
| • Rated value | 80 mA; Per channel |
| • permissible range, lower limit | 0 mA |
| • permissible range, upper limit | 90 mA |

| Power loss | |
|------------------|-------|
| 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 current for current input (destruction limit), max. | 30 mA |
| Cycle time (all channels) max. | 250 μ s |

| Input ranges (rated values), currents | |
|---------------------------------------|--------------|
| • 0 to 20 mA | Yes |
| • Input resistance (0 to 20 mA) | 106 Ω |
| • -20 mA to +20 mA | Yes |
| • 4 mA to 20 mA | Yes |

| 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 |

| Smoothing of measured values | |
|------------------------------|---------------------|
| • parameterizable | Yes |
| • Step: None | Yes; 1x cycle time |
| • Step: low | Yes; 4x cycle time |
| • Step: Medium | Yes; 16x cycle time |
| • Step: High | Yes; 32x cycle time |

| Encoder | |
|--|----|
| Connection of signal encoders | |
| • for current measurement as 2-wire transducer | No |

| 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 range), (+/-) | 0.1 % |

| | |
|---|--------------------------------------|
| Operational error limit in overall temperature range | |
| • Current, relative to input range, (+/-) | 0.3 % |
| Basic error limit (operational limit at 25 °C) | |
| • Current, relative to input range, (+/-) | 0.2 % |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | Yes |
| Interrupts/diagnostics/status information | |
| Alarms | |
| • Hardware interrupt | Yes |
| Diagnostic messages | |
| • Diagnostic information readable | Yes |
| • Wire-break | Yes; Measuring range 4 to 20 mA only |
| • Group error | Yes |
| • Overflow/underflow | Yes |
| Diagnostics indication LED | |
| • Group error SF (red) | Yes |
| Parameter | |
| Diagnostics wire break | At 4 to 20 mA |
| Measurement type/range | 4 to 20 mA, 0 to 20 mA, ±20 mA |
| Group diagnostics | Yes |
| Overflow/underflow | Yes |
| 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 |
| Permissible potential difference | |
| between MANA and M internally (UISO) | 75 V DC/60 V AC |
| Dimensions | |
| Width | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |
| Weights | |
| Weight, approx. | 45 g |
| last modified: | 05/09/2019 |