

SIMATIC DP, Electronics module 2 AI I High Feature for ET 200S, 15 mm width, Cycle time per module: 0.5 ms, +/-20mA; 15 bit+sign, 4..20mA; 15 bit, Operational limit +/-0.1% 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. | 48 mA  |
| from backplane bus 3.3 V DC, max.         | 10 mA  |
| Output voltage                            |        |
| Power supply to the transmitters          |        |
| • present                                 | Yes    |
| Power loss                                |        |
| Power loss, typ.                          | 1.2 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.  | 50 mA                                                                                                  |
| Cycle time (all channels) max.                                         | 0.5 ms; 0.5 ms for 2 channels without noise suppression, 18 / 21 ms per channel with noise suppression |
| Input ranges (rated values), currents                                  |                                                                                                        |
| • -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                                                                                                 |
| • Interference voltage suppression for interference frequency f1 in Hz | 60 / 50 Hz / no                                                                                        |
| • Conversion time (per channel)                                        | 0.04 ms; Without noise suppression 17/20 ms per channel with error                                     |
| Errors/accuracies                                                      |                                                                                                        |
| Operational error limit in overall temperature range                   |                                                                                                        |
| • Current, relative to input range, (+/-)                              | 0.1 %; 0.2% without interference frequency suppression                                                 |
| Basic error limit (operational limit at 25 °C)                         |                                                                                                        |
| • Current, relative to input range, (+/-)                              | 0.05 %; 0.1% without interference frequency suppression                                                |
| Interrupts/diagnostics/status information                              |                                                                                                        |
| Alarms                                                                 |                                                                                                        |
| • Hardware interrupt                                                   | Yes                                                                                                    |
| Diagnostic messages                                                    |                                                                                                        |
| • 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                                                              |                                                                                                        |
| Remark                                                                 | 12 bytes, 4 bytes in compatibility mode                                                                |
| Diagnostics wire break                                                 | Disable / enable                                                                                       |
| Measurement type/range                                                 | deactivated / $\pm 20$ mA / 4 to 20 mA                                                                 |
| Group diagnostics                                                      | Disable / enable                                                                                       |
| Overflow/underflow                                                     | Disable / enable                                                                                       |
| Potential separation                                                   |                                                                                                        |
| Potential separation analog inputs                                     |                                                                                                        |
| • between the channels                                                 | No; however, increased permissible potential difference between the inputs.                            |

- between the channels and backplane bus
- Between the channels and load voltage L+

Yes  
Yes

#### Dimensions

|        |       |
|--------|-------|
| Width  | 15 mm |
| Height | 81 mm |
| Depth  | 52 mm |

#### Weights

|                 |      |
|-----------------|------|
| Weight, approx. | 45 g |
|-----------------|------|

**last modified:** 12/14/2019