

SIMATIC S7-1200, ANALOG OUTPUT, SM 1232, 2 AO, +/-10V, 14 BIT RESOLUTION, OR 0 - 20 MA/4 - 20 MA, 13 BIT RESOLUTION



| Supply voltage | |
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| Rated value (DC) | |
| <ul style="list-style-type: none"> • 24 V DC | Yes |
| Input current | |
| Current consumption, typ. | 45 mA |
| from backplane bus 5 V DC, typ. | 80 mA |
| Power loss | |
| Power loss, typ. | 1.5 W |
| Analog outputs | |
| Number of analog outputs | 2; Current or voltage |
| Output ranges, voltage | |
| <ul style="list-style-type: none"> • -10 V to +10 V | Yes |
| Output ranges, current | |
| <ul style="list-style-type: none"> • 0 to 20 mA | Yes |
| Load impedance (in rated range of output) | |
| <ul style="list-style-type: none"> • with voltage outputs, min. | 1 000 Ω |
| <ul style="list-style-type: none"> • with current outputs, max. | 600 Ω |

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| Cable length | |
| • shielded, max. | 100 m; shielded, twisted pair |
| Analog value generation for the outputs | |
| Integration and conversion time/resolution per channel | |
| • Resolution (incl. overrange) | Voltage: 14 bits; Current : 13 bits |
| Errors/accuracies | |
| Temperature error (relative to output range), (+/-) | 25 °C ±0.3%, to 55 °C ±0.6% total measurement range |
| Basic error limit (operational limit at 25 °C) | |
| • Voltage, relative to output range, (+/-) | 0.3 % |
| • Current, relative to output range, (+/-) | 0.3 % |
| Interference voltage suppression for $f = n \times (f_1 \pm 1 \%)$, f_1 = interference frequency | |
| • Common mode voltage, max. | 12 V |
| Interrupts/diagnostics/status information | |
| Alarms | Yes |
| Diagnostic functions | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnostic messages | |
| • Monitoring the supply voltage | Yes |
| • Wire-break | Yes |
| • Short-circuit | Yes |
| Diagnostics indication LED | |
| • for status of the outputs | Yes |
| • for maintenance | Yes |
| Degree and class of protection | |
| Degree of protection acc. to EN 60529 | |
| • IP20 | Yes |
| Standards, approvals, certificates | |
| CE mark | Yes |
| CSA approval | Yes |
| FM approval | Yes |
| RCM (formerly C-TICK) | Yes |
| Ambient conditions | |
| Free fall | |
| • Fall height, max. | 0.3 m; five times, in product package |
| Ambient temperature during operation | |
| • min. | -20 °C |
| • max. | 60 °C |
| • horizontal installation, min. | -20 °C |
| • horizontal installation, max. | 60 °C |

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| • vertical installation, min. | -20 °C |
| • vertical installation, max. | 50 °C |
| Ambient temperature during storage/transportation | |
| • min. | -40 °C |
| • max. | 70 °C |
| Air pressure acc. to IEC 60068-2-13 | |
| • Operation, min. | 795 hPa |
| • Operation, max. | 1 080 hPa |
| • Storage/transport, min. | 660 hPa |
| • Storage/transport, max. | 1 080 hPa |
| Relative humidity | |
| • Operation at 25 °C without condensation, max. | 95 % |
| Pollutant concentrations | |
| • SO2 at RH < 60% without condensation | SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free |
| Connection method | |
| required front connector | Yes |
| Mechanics/material | |
| Enclosure material (front) | |
| • Plastic | Yes |
| Dimensions | |
| Width | 45 mm |
| Height | 100 mm |
| Depth | 75 mm |
| Weights | |
| Weight, approx. | 180 g |
| last modified: | 11/28/2017 |