



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

| | |
|---------------------------------|------------------------|
| Supply voltage | |
| 24 V DC | Yes |
| Input current | |
| Current consumption, typ. | 45 mA |
| from backplane bus 5 V DC, typ. | 80 mA |
| Power losses | |
| Power loss, typ. | 1.5 W |
| Analog inputs | |
| Number of analog inputs | 0 |
| Thermocouple (TC) | |
| Temperature compensation | |
| Parameterizable | No |
| Analog outputs | |
| Number of analog outputs | 2 ; Current or voltage |
| Output ranges, voltage | |
| -10 to +10 V | Yes |
| Output ranges, current | |
| 0 to 20 mA | Yes |

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| Load impedance (in rated range of output) | |
| with voltage outputs, min. | 1000 Ω |
| with current outputs, max. | 600 Ω |
| Analog value creation | |
| Measurement principle | Differential |
| Integrations and conversion time/ resolution per channel | |
| Resolution (incl. overrange) | Voltage: 14 bits; Current : 13 bits |
| Integration time, parameterizable | Yes |
| Interference voltage suppression for interference frequency f1 in Hz | 40 dB, DC to 60 V for interference frequency 50 / 60 Hz |
| Errors/accuracies | |
| Temperature error (relative to output area) | 25 °C ±0.3% to 55 °C ±0.6% total measurement range |
| Basic error limit (operational limit at 25 °C) | |
| Voltage, relative to output area | +/- 0,3 % |
| Current, relative to output area | +/- 0,3 % |
| Interference voltage suppression for $f = n \times (f1 \pm 1\%)$, f1 = interference frequency | |
| common mode voltage, max. | 12 V |
| Interrupts/diagnostics/status information | |
| Alarms | |
| Alarms | Yes |
| Diagnostic alarm | Yes |
| Diagnostic messages | |
| Diagnostic functions | Yes |
| 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 | |
| IP20 | Yes |
| Standards, approvals, certificates | |
| CE mark | Yes |
| C-TICK | Yes |
| FM approval | Yes |
| Climatic and mechanical conditions for storage and transport | |
| Climatic conditions for storage and transport | |
| Free fall | |

| | |
|--|---|
| Drop height, max. (in packaging) | 0.3 m ; five times, in dispatch package |
| Temperature | |
| Permissible temperature range | -40 °C to +70 °C |
| Air pressure acc. to IEC 60068-2-13 | |
| Permissible air pressure | 1080 to 660 hPa |
| Mechanical and climatic conditions during operation | |
| Climatic conditions in operation | |
| Temperature | |
| Permissible temperature range | -20 °C to +60 °C horizontal mounting -20 °C to 50 °C vertical mounting 95% humidity, non-condensing |
| Min. | -20 °C |
| max. | 60 °C |
| Air pressure acc. to IEC 60068-2-13 | |
| Permissible air pressure | 1080 to 795 hPa |
| 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 | |
| Type of housing (front) | |
| Plastic | Yes |
| Dimensions | |
| Width | 45 mm |
| Height | 100 mm |
| Depth | 75 mm |
| Weight | |
| Weight, approx. | 180 g |
| Status | Jul 11, 2013 |