




SIMATIC S7-300, Analog output SM 332, isolated by channel, 4 AI, Resolution 16 bit, 0-10 V, 1-5 V, +/-10 V, +/-20 mA, 0/4-20mA, 20-pole, suitable for isochronous mode improved bus cycle times for the isochronous mode

| Supply voltage | |
|--|------------------------------------|
| Load voltage L+ | |
| • Rated value (DC) | 24 V |
| • Reverse polarity protection | Yes |
| Input current | |
| from load voltage L+ (without load), max. | 290 mA |
| from backplane bus 5 V DC, max. | 120 mA |
| Power loss | |
| Power loss, typ. | 3 W |
| Analog outputs | |
| Number of analog outputs | 4; Isochronous mode |
| Voltage output, short-circuit protection | Yes |
| Voltage output, short-circuit current, max. | 40 mA |
| Current output, no-load voltage, max. | 18 V |
| Output ranges, voltage | |
| • 0 to 10 V | Yes |
| • 1 V to 5 V | Yes |
| • -10 V to +10 V | Yes |
| Output ranges, current | |
| • 0 to 20 mA | Yes |
| • -20 mA to +20 mA | Yes |
| • 4 mA to 20 mA | Yes |
| Load impedance (in rated range of output) | |
| • with voltage outputs, min. | 1 kΩ |
| • with voltage outputs, capacitive load, max. | 1 μF |
| • with current outputs, max. | 500 Ω |
| • with current outputs, inductive load, max. | 1 mH |
| Cable length | |
| • shielded, max. | 200 m |
| Analog value generation for the outputs | |
| Integration and conversion time/resolution per channel | |
| • Resolution with overrange (bit including sign), max. | 16 bit |
| • Conversion time (per channel) | 200 μs; in isochronous mode 640 μs |
| Settling time | |
| • for resistive load | 0.2 ms |
| • for capacitive load | 3.3 ms |
| • for inductive load | 0.5 ms |
| Errors/accuracies | |
| Operational error limit in overall temperature range | |

| | |
|--|---|
| • Voltage, relative to output range, (+/-) | 0.12 % |
| • Current, relative to output range, (+/-) | 0.18 % |
| Basic error limit (operational limit at 25 °C) | |
| • Voltage, relative to output range, (+/-) | 0.02 % |
| • Current, relative to output range, (+/-) | 0.02 % |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes; Parameterizable |
| Alarms | |
| • Diagnostic alarm | Yes; Parameterizable |
| Diagnoses | |
| • Diagnostic information readable | Yes |
| Diagnostics indication LED | |
| • Group error SF (red) | Yes |
| Potential separation | |
| Potential separation analog outputs | |
| • between the channels | Yes |
| • between the channels and backplane bus | Yes |
| • between the channels and the power supply of the electronics | Yes |
| Isolation | |
| Isolation tested with | 1 500 V DC |
| connection method / header | |
| required front connector | 20-pin |
| Dimensions | |
| Width | 40 mm |
| Height | 125 mm |
| Depth | 117 mm |
| Weights | |
| Weight, approx. | 220 g |
| last modified: | 1/17/2021  |