



SIMATIC S7-300, ANALOG OUTPUT SM 332, OPTICALLY ISOLATED, 4 AO, U/I; DIAGNOSTICS; RESOLUTION 11/12 BITS, 20 PIN, REMOVE/INSERT W. ACTIVE, BACKPLANE BUS

Figure similar

Supply voltage

Load voltage L+

- | | |
|-------------------------------|------|
| • Rated value (DC) | 24 V |
| • Reverse polarity protection | Yes |

Input current

- | | |
|---|--------|
| from load voltage L+ (without load), max. | 240 mA |
| from backplane bus 5 V DC, max. | 60 mA |

Power loss

- | | |
|------------------|-----|
| Power loss, typ. | 3 W |
|------------------|-----|

Analog outputs

- | | |
|---|-------|
| Number of analog outputs | 4 |
| Voltage output, short-circuit protection | Yes |
| Voltage output, short-circuit current, max. | 25 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 k Ω |
|------------------------------|--------------|

• with voltage outputs, capacitive load, max.	1 μ F
• with current outputs, max.	500 Ω
• with current outputs, inductive load, max.	10 mH
Cable length	
• shielded, max.	200 m

Analog value generation

Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit; +/-10 V, +/-20 mA, 4 to 20 mA, 1 to 5 V: 11 bits + sign; 0 to 10 V, 0 to 20 mA: 12 bits
• Conversion time (per channel)	0.8 ms

Settling time	
• for resistive load	0.2 ms
• for capacitive load	3.3 ms
• for inductive load	0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)

Errors/accuracies

Operational error limit in overall temperature range	
• Voltage, relative to output area, (+/-)	0.5 %
• Current, relative to output area, (+/-)	0.6 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output area, (+/-)	0.4 %
• Current, relative to output area, (+/-)	0.5 %

Interrupts/diagnostics/status information

Substitute values connectable	Yes; Parameterizable
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostic messages	
• Diagnostic functions	Yes; Parameterizable
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Potential separation

Potential separation analog outputs	
• between the channels and the backplane bus	Yes

Isolation

Isolation tested with	500 V DC
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Connection method

required front connector	20-pin
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Dimensions

Width	40 mm
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Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	220 g
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