

SIMATIC DP, Electronics module ET 200S: 2 AI High Speed U, 15 bit, 15 mm width, Cycle time of module: 0.1 ms, with SF LED (group fault)



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.	130 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	2 W
Address area	
Address space per module	
• Address space per module, max.	4 byte
Analog inputs	
Number of analog inputs	2
permissible input voltage for voltage input (destruction limit), max.	35 V; Permanent

Cycle time (all channels) max.	250 μ s
Input ranges (rated values), voltages	
• 1 V to 5 V	Yes
• Input resistance (1 V to 5 V)	120 k Ω
• -10 V to +10 V	Yes
• Input resistance (-10 V to +10 V)	120 k Ω
• -2.5 V to +2.5 V	Yes
• Input resistance (-2.5 V to +2.5 V)	120 k Ω
• -5 V to +5 V	Yes
• Input resistance (-5 V to +5 V)	120 k Ω
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; 15 bit: 1 to 5 V; \pm 2.5 V; 16 bit: \pm 10 V; \pm 5 V
• Conversion time (per channel)	15 μ s
Smoothing of measured values	
• parameterizable	Yes
• Step: None	Yes; 1x cycle time
• Step: low	Yes; 4x cycle time
• Step: Medium	Yes; 16x cycle time
• Step: High	Yes; 32x cycle time
Encoder	
Connection of signal encoders	
• for voltage measurement	Yes
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.03 %
Temperature error (relative to input range), (+/-)	0.01 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to input range), (+/-)	0.1 %
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	0.3 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input range, (+/-)	0.2 %
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Interrupts/diagnostics/status information	
Alarms	

• Hardware interrupt	Yes
Diagnostic messages	
• Diagnostic information readable	Yes
• Wire-break	Yes; at 1 to 5 V
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter	
Remark	12 bytes, 4 bytes in compatibility mode
Measurement type/range	Deactivated / ± 5 V / 1 to 5 V / ± 10 V / ± 2.5 V
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable

Potential separation	
Potential separation analog inputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes

Isolation	
Isolation tested with	500 V DC

Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm

Weights	
Weight, approx.	40 g

last modified: 08/16/2019