

*** SPARE PART*** SIMATIC DP, ELECTRONIC MODULE 2 AI
HIGH SPEED U FOR ET 200S, 15 MM WIDE, +/-10V; 11 BIT +
SIGN, CYCLE TIME OF THE MODULE: 1MS WITH LED SF
(GROUP FAULT)

Supply voltage

Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V; From power module

Input current

from load voltage L+ (without load), max.	35 mA
from backplane bus 3.3 V DC, max.	10 mA

Power loss

Power loss, typ.	0.8 W
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Address area

Address space per module	
<ul style="list-style-type: none"> 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; 35 V continuous; 75 V for max. 1 ms
Cycle time (all channels) max.	1 ms

Input ranges

<ul style="list-style-type: none"> Voltage 	Yes
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Input ranges (rated values), voltages

<ul style="list-style-type: none"> -10 V to +10 V 	Yes
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Cable length

<ul style="list-style-type: none"> shielded, max. 	200 m
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Analog value generation for the inputs

Measurement principle	Actual value encryption
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Integration and conversion time/resolution per channel

<ul style="list-style-type: none"> Resolution with overrange (bit including sign), max. 	12 bit
<ul style="list-style-type: none"> Conversion time (per channel) 	0.1 ms

Smoothing of measured values

<ul style="list-style-type: none"> parameterizable 	Yes
<ul style="list-style-type: none"> Step: None 	Yes
<ul style="list-style-type: none"> Step: low 	Yes

- Step: Medium
- Step: High

Yes
Yes

Errors/accuracies

Linearity error (relative to input range), (+/-)	0.01 %
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 area), (+/-)	0.15 %
Operational error limit in overall temperature range	
• Voltage, relative to input area, (+/-)	1 %; +/-0.3% available soon
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input area, (+/-)	0.7 %
Interference voltage suppression for $f = n \times (f_1 \pm 1 \%)$, f_1 = interference frequency	
• Series mode interference (peak value of interference < rated value of input range), min.	70 dB

Interrupts/diagnostics/status information

Diagnostic messages	
• Wire-break	No
• Group error	Yes
• Overflow/underflow	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes

Parameter

Remark	4 byte
Measurement type/range	deactivated / +/-10 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

Permissible potential difference

Between the inputs and MANA (UCM)	2 V AC PP
between MANA and M internally (UISO)	75 V DC/60 V AC

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.

40 g

last modified:

29.01.2016