



SIMATIC DP, Electronics module f. ET200S, 2AI Standard I-4DMU 15 mm width, +/-20mA; 13 bit+sign 4.. 20mA; 12-bit for 4-wire transmitter Cycle time 65 ms/channel with SF LED (group fault)

General information	
Product function	
<ul style="list-style-type: none"> • Isochronous mode 	No
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.	30 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	0.6 W
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 current for current input (destruction limit), max.	40 mA
Cycle time (all channels) max.	Number of active channels per module x basic conversion time
Input ranges (rated values), currents	
<ul style="list-style-type: none"> • -20 mA to +20 mA 	Yes; 50 Ohm
<ul style="list-style-type: none"> • 4 mA to 20 mA 	Yes; 50 Ohm
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	200 m
Analog value generation for the inputs	
Measurement principle	integrating
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> • Resolution with overrange (bit including sign), max. 	14 bit; ±20 mA: 14 bit, 4 to 20 mA: 13 bit
<ul style="list-style-type: none"> • Integration time (ms) 	16,7 / 20 ms
<ul style="list-style-type: none"> • Interference voltage suppression for interference frequency f1 in Hz 	50 / 60 Hz
<ul style="list-style-type: none"> • Conversion time (per channel) 	65 ms; 55 / 65 ms
Smoothing of measured values	
<ul style="list-style-type: none"> • parameterizable 	Yes; In four stages by means of digital filtering
<ul style="list-style-type: none"> • Step: None 	Yes; 1x cycle time
<ul style="list-style-type: none"> • Step: low 	Yes; 4x cycle time
<ul style="list-style-type: none"> • Step: Medium 	Yes; 32x cycle time
<ul style="list-style-type: none"> • Step: High 	Yes; 64x cycle time
Errors/accuracies	
Operational error limit in overall temperature range	

<ul style="list-style-type: none"> • Current, relative to input range, (+/-) 	0.6 %
Basic error limit (operational limit at 25 °C)	
<ul style="list-style-type: none"> • Current, relative to input range, (+/-) 	0.4 %
Interrupts/diagnostics/status information	
Diagnoses	
<ul style="list-style-type: none"> • Wire-break 	Yes; Measuring range 4 to 20 mA only
<ul style="list-style-type: none"> • Group error 	Yes
<ul style="list-style-type: none"> • Overflow/underflow 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
Parameter	
Remark	4 byte
Diagnostics wire break	Disable / enable (only in measuring range 4 to 20 mA)
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
Potential separation	
Potential separation analog inputs	
<ul style="list-style-type: none"> • between the channels 	No
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes
<ul style="list-style-type: none"> • Between the channels and load voltage L+ 	No
Isolation	
Isolation tested with	500 V DC
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	40 g
last modified:	2/9/2021 