

SIEMENS

Product data sheet

6ES7134-4MB02-0AB0



SIMATIC DP,
ELECTRONIC MODULE 2 AI I HIGH FEATURE FOR
ET 200S,
15 MM WIDE,
CYCLE TIME PER MODULE: 0.5MS, +/-20MA;
15 BIT + SIGN, 4 .. 20MA;
15 BIT,
OPERATIONAL LIMITS +/-0.1% WITH LED SF
(GROUP FAULT)

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	48 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
present	Yes
short-circuit proof	Yes
Power losses	
Power loss, typ.	1.2 W
Address area	
Address space per module	

Address space per module, max.	4 byte
Analog inputs	
Number of analog inputs	2
Cycle time (all channels) max.	0.5 ms ; 0.5 ms for 2 channels without noise suppression, 18 / 21 ms per channel with noise suppression
permissible input current for current input (destruction limit), max.	50 mA
Input ranges	
Voltage	No
Current	Yes
Thermocouple	No
Resistance thermometer	No
Resistance	No
Input ranges (rated values), currents	
-20 to +20 mA	Yes
4 to 20 mA	Yes
Cable length	
Cable length, shielded, max.	200 m
Analog value creation	
Measurement principle	Sigma Delta
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	16 bit ; as required
Integration time, parameterizable	Yes
Interference voltage suppression for interference frequency f1 in Hz	60 / 50 Hz / no
Conversion time (per channel)	0.04 ms ; Without noise suppression 17/20 ms per channel with error
Smoothing of measured values	
Parameterizable	Yes ; In 4 stages: 1 x, 4 x, 16 x, 32 x cycle time
Step: None	Yes ; 1 x
Step: low	Yes ; 4 x
Step: Medium	Yes ; 16 x
Step: High	Yes ; 32 x

Encoder	
Connection of signal encoders	
Burden of 2-wire transmitter, max.	750 Ω
Errors/accuracies	
Linearity error (relative to input area)	+/- 0,03 %
Temperature error (relative to input area)	+/- 0,03 %/K
Crosstalk between the inputs, min.	-100 dB
Repeat accuracy in settled status at 25 °C (relative to input area)	+/- 0,01 %
Operational limit in overall temperature range	
Current, relative to input area	+/- 0,1 % ; 0.2% without interference frequency suppression
Basic error limit (operational limit at 25 °C)	
Current, relative to input area	+/- 0,05 % ; 0.1% without interference frequency suppression
Interference voltage suppression for $f = n \times (f_l \pm 1\%)$, f_l = interference frequency	
Series mode interference (peak value of interference < rated value of input range), min.	90 dB
common mode voltage (USS < 2.5 V) , min.	100 dB
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Interrupts/diagnostics/status information	
Alarms	
Hardware interrupt	Yes
Diagnostic messages	
Diagnostic functions	Yes
Wire break	Yes ; Measuring range 4 to 20 mA only
Group error	Yes
Overflow/underflow	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Parameter	
Remark	12 bytes, 4 bytes in compatibility mode
Diagnosis: wire break	Disable / enable

Measurement type/range	deactivated / +/-20 mA / 4 to 20 mA
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	No ; however, increased permissible potential difference between the inputs.
between the channels and the backplane bus	Yes
between the channels and the load voltage L+	Yes
Dimensions	
Width	15 mm
Module width, max.	15 mm
Height	81 mm
Depth	52 mm
Weight	
Weight, approx.	45 g
Status	Jul 17, 2012