

SIEMENS

Product data sheet

6ES7134-4LB02-0AB0


SIMATIC DP,
ELECTRONIC MODULE 2 AI U HIGH FEATURE FOR
ET 200S,
15 MM WIDE,
CYCLE TIME PER MODULE: 0.5MS, +/-10V;
15 BI + SIGN, +/-5V;15BIT+SIGN, 1..5V;
15BIT,
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.	55 mA
from backplane bus 3.3 V DC, max.	10 mA
Output voltage	
Power supply to the transmitters	
present	No
Power losses	
Power loss, typ.	0.85 W
Address area	
Address space per module	
Address space per module, max.	4 byte

Analog inputs	
Number of analog inputs	2
Cable length, shielded, max.	200 m
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.	0.5 ms ; 0.5 ms for 2 channels without noise suppression, 18 / 21 ms per channel with noise suppression
Input ranges	
Voltage	Yes
Current	No
Thermocouple	No
Resistance thermometer	No
Resistance	No
Input ranges (rated values), voltages	
1 to 5 V	Yes
Input resistance (1 to 5 V)	800 k Ω
-10 V to +10 V	Yes
Input resistance (-10 V to +10 V)	800 k Ω
-5 V to +5 V	Yes
Input resistance (-5 V to +5 V)	800 k Ω
Analog value creation	
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	16 bit ; 0 to 5 V: 15 bits, +/-10 V: 16 bits, +/-5 V: 16 bits
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	
for voltage measurement	Yes
Errors/accuracies	
Linearity error (relative to input area)	+/- 0,01 %
Temperature error (relative to input area)	+/- 0,003 %/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	
Voltage, relative to input area	+/- 0,1 % ; 0.2% without interference frequency suppression
Basic error limit (operational limit at 25 °C)	
Voltage, 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
Interrupts/diagnostics/status information	
Alarms	
Process alarm	Yes
Diagnoses	
Diagnostic functions	Yes
Wire break	Yes ; Measuring range 1 to 5 V only
Group error	Yes
Overflow/underflow	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Isochronous mode	
Isochronous mode	Yes
Parameter	
Remark	12 bytes, 4 bytes in compatibility mode

Measurement type/range	deactivated / +/-5 V / 1 to 5 V / +/-10 V
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
Permissible potential difference	
between the inputs (UCM)	140 V DC/100 V AC
Isolation	
Isolation checked with	500 VDC
Dimensions and weight	
Dimensions	
Width	15 mm
Module width, max.	15 mm
Height	81 mm
Depth	52 mm
Weight	
Weight, approx.	45 g
Status	May 16, 2011