

SIPLUS ET200S EM 2AI STANDARD I -25 ... +60 DEGREES C
 BASED ON 6ES7134-4GB01-0AB0



Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes; Destruction limit 35 mA per channel
Input current	
from load voltage L+ (without load), max.	80 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	
• 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	
• Voltage	No
• Current	Yes
• Thermocouple	No
• Resistance thermometer	No
• Resistance	No
Input ranges (rated values), currents	
• 4 mA to 20 mA	Yes; on 50 ohms
Cable length	
• shielded, max.	200 m
Analog value generation for the inputs	
Measurement principle	integrating
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	13 bit; 4 to 20 mA: 13 bits
• Integration time (ms)	16,7 / 20 ms
• Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz
• Conversion time (per channel)	65 ms; 55 / 65 ms
Smoothing of measured values	
• parameterizable	Yes; In four stages by means of digital filtering
• Step: None	Yes; 1 x cycle time
• Step: low	Yes; 4 x cycle time
• Step: Medium	Yes; 32 x cycle time
• Step: High	Yes; 64 x cycle time
Encoder	
Connection of signal encoders	
• for current measurement as 2-wire transducer — Burden of 2-wire transmitter, max.	750 Ω
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.01 %
Temperature error (relative to input range), (+/-)	0.005 %/K
Crosstalk between the inputs, min.	-50 dB
Repeat accuracy in steady state at 25 °C (relative to input area), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Current, relative to input area, (+/-)	0.6 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to input area, (+/-)	0.4 %
Interference voltage suppression for $f = n \times (f1 \pm 1 \%)$, f1 = interference frequency	

- Series mode interference (peak value of interference < rated value of input range), min.

70 dB

Isochronous mode

Isochronous operation (application synchronized up to terminal)

No

Interrupts/diagnostics/status information

Diagnostic messages

- Wire-break
- Group error
- Overflow/underflow

Yes

Yes

Yes

Diagnostics indication LED

- Group error SF (red)

Yes

Parameter

Remark

4 byte

Measurement type/range

deactivated / 4 to 20 mA

Group diagnostics

Disable / enable

Overflow/underflow

Disable / enable

Potential separation

Potential separation analog inputs

- between the channels
- between the channels and backplane bus
- Between the channels and load voltage L+

No

Yes

No

Isolation

Isolation tested with

500 V DC

Standards, approvals, certificates

CE mark

Yes

UL approval

Yes

Ambient conditions

Ambient temperature during operation

- min.
- max.

-25 °C; = Tmin

60 °C; = Tmax

Extended ambient conditions

- relative to ambient temperature-atmospheric pressure-installation altitude

Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)

Relative humidity

— With condensation, tested in accordance with IEC 60068-2-38, max.

100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)

Resistance

— against biologically active substances /
conformity with EN 60721-3-3

— against chemically active substances /
conformity with EN 60721-3-3

— against mechanically active substances /
conformity with EN 60721-3-3

Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!

Yes; Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!

Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	40 g
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last modified: 29.10.2015