

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



Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>Reverse polarity protection</li> </ul>	24 V; From power module 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	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	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 range), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Current, relative to input range, (+/-)	0.6 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to input range, (+/-)	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 Yes
- Group error Yes
- Overflow/underflow 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 No
- between the channels and backplane bus Yes
- Between the channels and load voltage L+ No

### Isolation

Isolation tested with

500 V DC

### Standards, approvals, certificates

CE mark

Yes

UL approval

Yes

### Ambient conditions

#### Ambient temperature during operation

- min. -25 °C; = Tmin
- max. 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); Class 3B3 on request

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
<b>last modified:</b>	05/23/2017