

Siemens  
EcoTech



SIMATIC ET 200SP, Analog input module, AI 8xI 2-/4-wire Basic, suitable for BU type A0, A1, Color code CC01, Module diagnostics, 16 bit

General information	
Product type designation	AI 8xI 2-/4-wire BA
HW functional status	FS23 or higher
Firmware version	V2.0.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
usable BaseUnits	BU type A0, A1
Color code for module-specific color-coded label	CC01
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> <li>Isochronous mode</li> </ul>	No
<ul style="list-style-type: none"> <li>Measuring range scalable</li> </ul>	No
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	TIA Portal V21
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.7 SP3
<ul style="list-style-type: none"> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	One GSD file each, Revision 3 and 5 and higher
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	GSDML V2.45
Operating mode	
<ul style="list-style-type: none"> <li>Oversampling</li> </ul>	No
<ul style="list-style-type: none"> <li>MSI</li> </ul>	No
CiR - Configuration in RUN	
Reparameterization possible in RUN	No
Calibration possible in RUN	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption (rated value)	25 mA; rated voltage, all channels active, no load
Current consumption, max.	725 mA; worst case voltage, all channels active, max. load, no derating
Encoder supply	
24 V encoder supply	
<ul style="list-style-type: none"> <li>24 V</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Short-circuit protection</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Output current, max.</li> </ul>	0.7 A; total current of all encoders/channels
Power loss	

Power loss, typ.	0.7 W; rated voltage, 50 % active channels, 50 % of range
<b>Address area</b>	
Address space per module	
• Address space per module, max.	16 byte
<b>Hardware configuration</b>	
Automatic encoding	
• Mechanical coding element	Yes
• Type of mechanical coding element	Type A
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type A0, A1
• 2-wire connection	BU type A0, A1
• 4-wire connection	BU type A0, A1 + potential distributor module
<b>Analog inputs</b>	
Number of analog inputs	
• For current measurement	8; Single-ended 8
permissible input current for current input (destruction limit), max.	50 mA
Cycle time (all channels), min.	1 ms; per channel
Input ranges (rated values), currents	
• 0 to 20 mA	Yes
— Input resistance (0 to 20 mA)	100 Ω; 15 bit
• -20 mA to +20 mA	Yes
— Input resistance (-20 mA to +20 mA)	100 Ω; 16 bit incl. sign
• 4 mA to 20 mA	Yes
— Input resistance (4 mA to 20 mA)	100 Ω; 15 bit
Cable length	
• shielded, max.	200 m
<b>Analog value generation for the inputs</b>	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit
• Integration time, parameterizable	Yes
• Interference voltage suppression for interference frequency f1 in Hz	16.67 / 50 / 60 / 4 800 (16.67 / 50 / 60)
• Conversion time (per channel)	180 / 60 / 50 / 0.625 (67.5 / 22.5 / 18.75) ms
Smoothing of measured values	
• Number of smoothing levels	4
• parameterizable	Yes
• Step: None	Yes
• Step: low	Yes; 4x smoothing
• Step: Medium	Yes; 8x smoothing
• Step: High	Yes; 16x smoothing
<b>Encoder</b>	
Connection of signal encoders	
• for voltage measurement	No
• for current measurement as 2-wire transducer	Yes
— Burden of 2-wire transmitter, max.	650 Ω
• for current measurement as 4-wire transducer	Yes
<b>Errors/accuracies</b>	
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, (+/-)	0.5 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to input range, (+/-)	0.3 %
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; With conversion time 67.5 / 22.5 / 18.75 ms: 40 dB

Interrupts/diagnostics/status information		
Diagnostics function	Yes	
Alarms		
• Diagnostic alarm	Yes	
• Limit value alarm	No	
Diagnoses		
• Monitoring the supply voltage	Yes	
• Wire-break	Yes; at 4 to 20 mA	
• Short-circuit	Yes; Sensor supply to M; module by module	
• Group error	Yes	
• Overflow/underflow	Yes; Module-wise	
Diagnostics indication LED		
• Monitoring of the supply voltage (PWR-LED)	Yes; green LED	
• Channel status display	Yes; green LED	
• for channel diagnostics	No	
• for module diagnostics	Yes; green/red DIAG LED	
Potential separation		
Potential separation channels		
• between the channels	No	
• between the channels and backplane bus	Yes	
• between the channels and the power supply of the electronics	No	
Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Ecological footprint		
• environmental product declaration	Yes	
Global warming potential		
— global warming potential, (total) [CO2 eq]	9.32 kg	
— global warming potential, (during production) [CO2 eq]	4.97 kg	
— global warming potential, (during operation) [CO2 eq]	4.79 kg	
— global warming potential, (after end of life cycle) [CO2 eq]	-0.449 kg	
Security		
signed firmware update	Yes; firmware V2.0.0 or higher	
safely removing data	Yes; firmware V2.0.0 or higher	
data integrity	Yes; firmware V2.0.0 or higher	
Ambient conditions		
Ambient temperature during operation		
• horizontal installation, min.	-30 °C; < 0 °C as of FS04	
• horizontal installation, max.	60 °C	
• vertical installation, min.	-30 °C; < 0 °C as of FS04	
• vertical installation, max.	50 °C	
Altitude during operation relating to sea level		
• Installation altitude above sea level, max.	5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200SP system manual	
Dimensions		
Width	15 mm	
Height	73 mm	
Depth	58 mm	
Weights		
Weight, approx.	31 g	
Classifications		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-26-01
eClass	12	27-24-26-01
eClass	9.1	27-24-26-01

eClass	9	27-24-26-01
eClass	8	27-24-26-01
eClass	7.1	27-24-26-01
eClass	6	27-24-26-01
ETIM	10	EC001596
ETIM	9	EC001596
ETIM	8	EC001596
ETIM	7	EC001596
IDEA	4	3562
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**

[Miscellaneous](#)



[Manufacturer Declaration](#)



[China RoHS](#)

**General Product Approval** **EMV** **For use in hazardous locations**



[Metrological Approval](#)



**For use in hazardous locations**

[EM](#)

[CCC-Ex](#)



[Type Examination Certificate](#)

[Miscellaneous](#)

**Maritime application**



[NK / Nippon Kaiji Kyokai](#)



**Maritime application** **Environment**



[CCS \(China Classification Society\)](#)



Siemens EcoTech



last modified:

10/23/2025

# TURLL

YOUR GLOBAL AUTOMATION PARTNER

## 6ES7134-6GF00-0AA1

OFFICIAL DATASHEET & QUOTATION

- 100% New & Original Factory Sealed
- Global Express Shipping (DHL/FedEx/UPS)
- 12-Month Warranty Protection
- Professional Technical Support

[CHECK STOCK & PRICE](#)



Need Assistance? Scan to Chat on WhatsApp

[sales@turl.com](mailto:sales@turl.com) | +852 6339 7344