

SIEMENS

Product data sheet

6ES7134-7SD00-0AB0


SIMATIC DP,
ELECT. SUBMODULE FOR ET200ISP, 4 AI,
TC,
FOR CONNECTION OF THERMOELEMENTS
(VOLTAGE MEASUREMENT)

Input current	
from supply voltage L+, max.	30 mA
Power losses	
Power loss, typ.	0.4 W
Analog inputs	
Number of analog inputs	4
Cycle time (all channels) max.	320 ms ; 66 ms basic conversion time x 4 channels with 60 Hz interference frequency suppression; 80 ms basic conversion time x 4 channels with 50 Hz interference frequency suppression
Technical unit for temperature measurement adjustable	Yes
Input ranges	
Voltage	Yes
Current	No
Thermocouple	Yes
Resistance thermometer	No

Resistance	No
Input ranges (rated values), voltages	
-80 mV to +80 mV	Yes
Input resistance (-80 mV to +80 mV)	1000 kΩ
Input ranges (rated values), thermoelements	
Type B	Yes
Input resistance (Type B)	1000 kΩ
Type C	Yes
Input resistance (Type C)	1000 kΩ
Type E	Yes
Input resistance (Type E)	1000 kΩ
Type J	Yes
Input resistance (type J)	1000 kΩ
Type K	Yes
Input resistance (Type K)	1000 kΩ
Type L	Yes
Input resistance (Type L)	1000 kΩ
Type N	Yes
Input resistance (Type N)	1000 kΩ
Type R	Yes
Input resistance (Type R)	1000 kΩ
Type S	Yes
Input resistance (Type S)	1000 kΩ
Type T	Yes
Input resistance (Type T)	1000 kΩ
Type U	Yes
Input resistance (Type U)	1000 kΩ
Thermocouple (TC)	
for thermocouples	1
Temperature compensation	
internal temperature compensation	Yes ; via supplied TC sensor module
external temperature compensation with compensations socket	Yes ; via temperature value, acquired by an analog module of the same ET 200iSP station
Characteristic linearization	

Parameterizable	Yes
Cable length	
Cable length, shielded, max.	50 m
Analog value creation	
Measurement principle	integrating (Sigma-Delta)
Integrations and conversion time/ resolution per channel	
Resolution with overrange (bit including sign), max.	16 bit
Integration time, parameterizable	Yes
Basic conversion time, including integration time, ms	80 ms at 50 Hz; 66 ms at 60 Hz
additional conversion time for wire break monitoring	5
Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz
Smoothing of measured values	
Parameterizable	Yes ; in 4 stages
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
Errors/accuracies	
Linearity error (relative to input area)	+/- 0.015 %
Temperature error (relative to input area)	+/- 0.02 %
Crosstalk between the inputs, min.	-50 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	+/- 0.15 %
Basic error limit (operational limit at 25 °C)	
Voltage, relative to input area	+/- 0.1 %
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.	70 dB
Common mode interference, min.	90 dB

Interrupts/diagnostics/status information	
Alarms	
Diagnostic alarm	Yes ; Parameterizable
Limit value alarm	Yes ; Parameterizable
Diagnostic messages	
Diagnostic information readable	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	Yes ; Functional, yes
between the channels and the backplane bus	Yes
Standards, approvals, certificates	
CE mark	Yes
Use in hazardous areas	
Type of protection acc. to EN 50020 (CENELEC)	II2 G (1) GD Ex ib[ia] IIC T4 and I M2 Ex ib[ia] I
Type of protection acc. to KEMA	04 ATEX 1246
Dimensions	
Width	30 mm
Height	129 mm
Depth	136.5 mm
Weight	
Weight, approx.	230 g
Status	Jul 17, 2012