



SIMATIC DP,
ELECTRONIC MODULE FOR ET200PRO 4 AI U HIGH
FEATURE,
+-10V;
0...10V;
+-5V;
1...5V;
CHANNEL DIAGNOSTICS;
INCLUSIVE BUS MODULE CONNECTING MODULE IO
6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Reverse polarity protection	Yes ; against destruction
Input current	
from backplane bus 3.3 V DC, max.	12 mA ; Typical
Power losses	
Power loss, typ.	1.1 W
Address area	
Address space per module	
Address space per module, max.	8 byte
Analog inputs	
Number of analog inputs	4
permissible input voltage for voltage input (destruction limit), max.	35 V
Cycle time (all channels) max.	5 ms
Input ranges	
Voltage	Yes
Current	No

Thermocouple	No
Resistance thermometer	No
Resistance	No
Input ranges (rated values), voltages	
0 to +10 V	Yes
1 to 5 V	Yes
-10 V to +10 V	Yes
-5 V to +5 V	Yes
Cable length	
Cable length, shielded, max.	30 m
Analog value creation	
Measurement principle	integrating
Integrations and conversion time/resolution per channel	
Resolution with overrange (bit including sign), max.	15 bit ; 15 bits + sign at ± 10 V, at ± 5 V; 15 bits at 0 V to 10 V, at 1 V to 5 V
Integration time, ms	0,3 / 16,7 / 20 / 60
Interference voltage suppression for interference frequency f1 in Hz	16,67 / 50 / 60 / 3600
Conversion time (per channel)	1.1 ms
Smoothing of measured values	
Parameterizable	Yes
Step: None	Yes ; 1 x cycle time
Step: low	Yes ; 4 x cycle time
Step: Medium	Yes ; 16 x cycle time
Step: High	Yes ; 64 x cycle time
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.0075 %
Temperature error (relative to input range), (+/-)	0.00075 %/K
Crosstalk between the inputs, min.	-70 dB
Repeat accuracy in steady state at 25 °C (relative to input area), (+/-)	0.0040 %
Operational limit in overall temperature range	
Voltage, relative to input area, (+/-)	0.1 %
Basic error limit (operational limit at 25 °C)	
Voltage, relative to input area, (+/-)	0.075 %
Interference voltage suppression for $f = n \times (f_1 \pm 0.5 \%)$, f_1 = interference frequency	
Series mode interference (peak value of interference < rated value of input range), min.	60 dB
common mode voltage (USS < 2.5 V) , min.	80 dB ; Interference voltage < 10 V
Interrupts/diagnostics/status information	

Diagnostic messages	
Wire break	Yes ; at 1 to 5 V
Group error	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	No
between the channels and the backplane bus	Yes
Permissible potential difference	
between inputs and MANA (UCM)	10 Vpp AC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	45 mm
Height	130 mm
Depth	35 mm
Weights	
Weight, approx.	150 g
Status	Jun 16, 2014