

*** SPARE PART*** SIMATIC SC,ELECTRONIC
SUBMODULE 2 AI,
4..20mA, +/-20mA

Supply voltage	
Load voltage 1L+	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from supply voltage L+, max.	30 mA
Power losses	
Power loss, max.	0.6 W
Hardware configuration	
Rack	
Required terminal block	TB 16SC
Slots	
Required slots	1 ; from 8
Analog inputs	
Number of analog inputs	2
permissible input current for current input (destruction limit), max.	40 mA ; Permanent
Input ranges	
Current	Yes
Input ranges (rated values), currents	
-20 to +20 mA	Yes
Input resistance (-20 to +20 mA)	50 Ω
4 to 20 mA	Yes
Input resistance (4 to 20 mA)	50 Ω
Thermocouple (TC)	
Temperature compensation	
Parameterizable	No
Characteristic linearization	
Parameterizable	No
Cable length	
Cable length, shielded, max.	200 m
Encoder	

Connection of signal encoders	
for voltage measurement as 2-wire transducer	Yes ; 4-wire transformer with external transmitter feed
for current measurement as 2-wire transducer	Yes ; with external transmitter supply
for current measurement as 4-wire transducer	Yes
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.05 %
Temperature error (relative to input range), (+/-)	0.01 %/K
Crosstalk between the inputs, min.	50 dB ; At 50/60 Hz
Repeat accuracy in steady state at 25 °C (relative to input area), (+/-)	0.1 %
Operational limit in overall temperature range	
Current, relative to input area, (+/-)	1 %
Basic error limit (operational limit at 25 °C)	
Current, relative to input area, (+/-)	0.8 %
Interference voltage suppression for $f = n \times (f_1 \pm 1 \%)$, f_1 = interference frequency	
Series mode interference (peak value of interference < rated value of input range), min.	70 dB
common mode voltage (USS < 2.5 V) , min.	90 dB
Interrupts/diagnostics/status information	
Alarms	
Alarms	No
Diagnostic messages	
Diagnostic functions	No
Galvanic isolation	
Galvanic isolation analog inputs	
between the channels	No
between the channels and the backplane bus	No ; Optocoupler
between the channels and the power supply of the electronics	No
Permissible potential difference	
between inputs and MANA (UCM)	2 V DC / 2 Vpp AC
Isolation	
Isolation checked with	1500 V AC
Dimensions	
Width	10 mm
Height	64 mm
Depth	51 mm
Weights	
Weight, approx.	20 g
Status	Dec 12, 2014