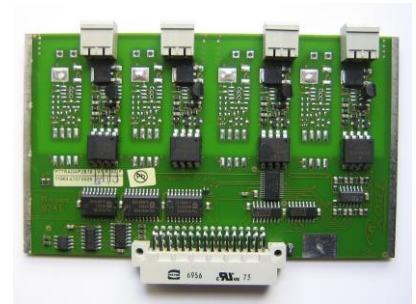


TBOX MS-4AI420

Version 3.06

TBOX MS-4AI420

- 4 analog inputs 4..20mA
- Isolated one by one



Technical Specifications



General

Consumption	10 mA				
Configuration	<table> <tr> <td>Hardware</td> <td>No hardware configuration required</td> </tr> <tr> <td>Software</td> <td>Signal selection during channel configuration</td> </tr> </table>	Hardware	No hardware configuration required	Software	Signal selection during channel configuration
Hardware	No hardware configuration required				
Software	Signal selection during channel configuration				
Mode	Passive, input stage powered by the loop				
Signals	4..20mA Cabling to 4/20. Select in TWinSoft, signal 4..20mA				
Resolution	<table> <tr> <td>ADC</td> <td>14 bits</td> </tr> <tr> <td>Current</td> <td>3.1 μA</td> </tr> </table>	ADC	14 bits	Current	3.1 μ A
ADC	14 bits				
Current	3.1 μ A				
Accuracy @ 25°C	<table> <tr> <td>Current</td> <td>0.1% FS</td> </tr> </table>	Current	0.1% FS		
Current	0.1% FS				
Voltage on Input	<table> <tr> <td>Typ.:</td> <td>4.5 Vdc</td> </tr> <tr> <td>Max.</td> <td>6 Vdc</td> </tr> </table>	Typ.:	4.5 Vdc	Max.	6 Vdc
Typ.:	4.5 Vdc				
Max.	6 Vdc				
Replacement	Hot removable. No risk to damage hardware, but reset is required.				
Test	Automatic test of card access by the CPU.				
Connector	<table> <tr> <td>Screw connector</td> <td>(10 x 5.08 mm)</td> </tr> <tr> <td>Wire thickness:</td> <td>0.14 – 2.5 mm² (or max. 12 AWG)</td> </tr> </table>	Screw connector	(10 x 5.08 mm)	Wire thickness:	0.14 – 2.5 mm ² (or max. 12 AWG)
Screw connector	(10 x 5.08 mm)				
Wire thickness:	0.14 – 2.5 mm ² (or max. 12 AWG)				

Protection

Polarity	Protection against inversion of polarity
Voltage	Protection against voltage applied to the input (max : 30 Vdc – 50 mA)

Isolation

Each input	Isolated one by one, from CPU GND and Earth
Level of isolation	500 Vrms

Digital Input

Validity input (DI) Returns '0' when signal < 2.4mA and > 21.6 mA
Returns '1' when the 4..20mA signal is valid

LED

Cs **Card Selection:** card corresponding to card declared in TWinSoft

ER **Error:** card type not corresponding to the one declared in TWinSoft

Environment

Temperature storage -40°C to 85°C

Temperature working (ambient) **Industrial Temperature:** -40°C to 70°C

Humidity 5 to 95 % without condensation

Altitude Max. 5000 m

Dimensions

Without connector Height x Depth x Width: **150 x 83 x 29 mm**
(5.906 x 3.27 x 1.142 inches)

Weight 300 g

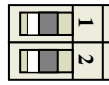
Approvals

CE, UL, CSA, C-Tick

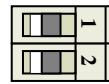
Cabling Schematic

Connector: **Screw connector**

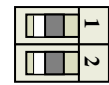
Pin Out:



- 1 input 0: 4..20m (+)
- 2 input 0: 4..20m (-)



- 1 input 1: 4..20m (+)
- 2 input 1: 4..20m (-)

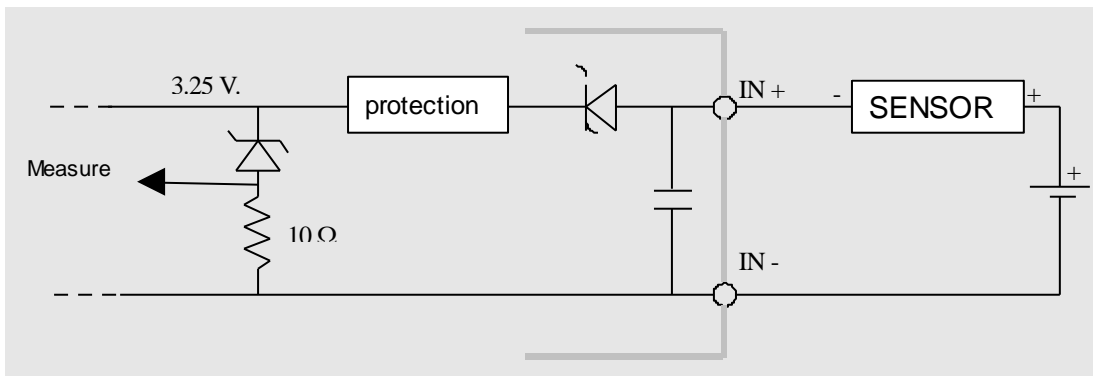


- 1 input 2: 4..20m (+)
- 2 input 2: 4..20m (-)



- 1 input 3: 4..20m (+)
- 2 input 3: 4..20m (-)

Cabling to 2 Wires sensor (current)



Cabling to 4 Wires sensor (current)

