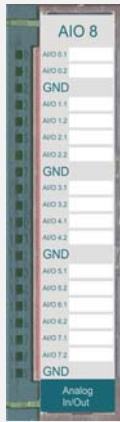


fred modulo AIO8



- **8 arbitrarily combined multi-functional channels**
- **characteristic line, linearisation and calibration**
- **software sided parametric sensor**
- **software sided parametric sensor scanning time and HW filter**
- **internal temperature compensation**
- **own processor modul**
- **status LED's**

Technical data

number digital I/O	8 (freely configurable as in- and output)	
analog inputs		
measuring ranges	see the following table	
A/D converter	12 Bit	
measuring sizes	current, voltage, resistance, RTC, thermocouples (TC), KTY	
characteristic line arisation	for thermocouples/-resistance	
signal generator	for current for resistance	2-wire 2/3-wire
transformation time channel	120 ms	
analog outputs		
D/A-transformation	12 Bit	
voltage scaling	0...10 V, 40 mV dissolution	
current scaling	0/4-20 mA, 80 µA dissolution	
current Tension	500 Ohm	
transformation time channel	12,8ms	
general		
front panel	IP20	
EMI-test	EN61000-6-2, EN61000-6-4	
protection rating	according to VDE 0411	
safety class	IP20 according to DIN40050	
mounting	fixing on top hat rail DIN50022	
dimension in mm (W x H x D)	35 x 127 x 142,7	
operating temperature	0° to 50°C	
weight	260 g	
order no:	fred-AIO8.11	
	20.42.000.03	

measuring ranges

	Typ	range	AIO8.1
thermocouples	B	250...1820°C	7,6
	E	-80...800°C	0,8
	J	-80...1200°C	1,2
	K	-80...1372°C	1,6
	L	-80...900°C	1,2
	N	-80...1300°C	2,0
	R	-45...1768°C	6,0
	S	-45...1768°C	6,4
thermo resistance	T	-100...400°C	1,6
	Pt100	-180...800°C	0,2
	Pt200	-200...230°C	0,2
	Pt500	-100...850°C	0,2
	Pt1000	-150...800°C	0,2
	Ni100	-150...250°C	0,2
	Ni120	-150...250°C	0,2
	Ni200	-150...250°C	0,2
thermo resistance	Ni500	-150...250°C	0,2
	Ni1000	-150...250°C	0,2
	CU10	-150...800°C	0,2
	KTY110/130	-100...100°C	0,2
	KTY11/13-5	-100...100°C	0,2
	KTY11/13-6	-100...100°C	0,2
	KTY11/13-7	-100...100°C	0,2
	KTY210/230	-70...200°C	0,2
thermo resistance	KTY21/23-5	-70...200°C	0,2
	KTY21/23-6	-70...200°C	0,2
	KTY21/23-7	-70...200°C	0,2

electric sizes	volt	0...10V	600µV
	volt	0...1V	120µV
	volt	0...100mV	40µV
	volt standardised	0...10V	600µV
	ampere	0...20mA	1,2µA
	ampere	4...20mA	1,2µA
	amp. standardised	0...20mA	1,2µA
	amp. standardised	4...20mA	1,2µA
	resistance	0...3790 Ohm	0,4 Ohm
	resistance	0...3790 Ohm	0,4 Ohm

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