Parameters of configurable inputs MS6D

Each Monitoring System contains 16 software configurable inputs from user PC. Also signals from sensors working on RS485 bus with ModBus or Advantech protocol can be recorded. RS485 input is available as optional accessory.

	Measured values	Range	Accuracy	Note
current	DC	4 to 20 mA	±0.1% FS (±0.02 mA)	it is possible to connect pasive sensors (powered by monitoring system) or active sensor with its own power supply. Input resistance about 110 Ohms.
voltage	DC	-10 V to+10 V	±0.1% FS (±10 mV)	Input resistance about 10 MOhms
		-1 V to +1 V	±0.1% FS (±1 mV)	
		-100 mV to +100 mV	±0.1% FS (±100 uV)	
		-18 mV to +18 mV	±0,1% FS (±18 uV)	
resistance	two-wire resistance measurement	0 to 300 Ohms	±0.1% FS (±0.3 Ohms)	measuring current approximately 0.8 mA @ 50 ms pulse
		0 to 3000 Ohms	±0.1% FS (±3 Ohms)	measuring voltage approximately 0.5 mA @ 50 ms pulse
		0 to 10000 Ohms	±0.1% FS (±10 Ohms)	measuring current approximately 0.1 mA @ 50 ms pulse
temperature probes Pt and Ni	Ni1000	-50 °C to +250 °C	±0.2 °C (-50 °C to 100 °C)	Ni1000/6180 ppm, two-wire connection
			±0.2 % MV (100 °C to 250 °C)	measuring current approximately 0.5 mA @ 50 ms pulse
	Pt100	-200 °C to +600 °C	±0.2 °C (-200 °C to+100 °C)	Pt100/3850 ppm, two-wire connection
			±0.2 % MV (+100 °C to +600 °C)	measuring current approximately 0.8 mA @ 50 ms pulse
	Pt1000	-200 °C to +600 °C	±0.2 °C (-200 °C to+100 °C)	Pt1000/3850 ppm, two-wire connection
			±0.2 % MV (+100 °C to +600 °C)	measuring current about 0.5 mA @ 50 ms pulse
thermocouple	K (NiCr-Ni)	-200 °C to 1300 °C	±(0.3 % MV +1.5 °C) MS6D only	linearized, with cold junction compensation, datalogger must be placed in recommendend working position
	T (Cu-CuNi)	-200 °C to 400 °C		
	J (Fe-Co)	-200 °C to 750 °C		
	S (Pt10 % Rh-Pt)	0 to 1700 °C		
	N (NiCrSi-NiSiMg)	-200 °C to 1300 °C		
	B (Pt30 % Rh-Pt)	100 °C to 1800 °C	±(0.3 % MV +1.0 °C) in range 300 °C to 1800 °C	linearized, without cold junction compensation
thermistor	NTC with selectable formula	up to maximum thermistor resistance 11000 Ohms	according to the used resistance range (see measurement of resistance)	the same characteristics for all connected thermistors
				default settings: R25=2252 Ohms, R80 = 282.7 Ohms
binary signal	potential-less contact	binary signal		input voltage for state „L" (IN-COM) < 0.8 V
				input voltage for state „H" (IN-COM) > 2 V
	open collector			resistance of closed contact for state „L" (IN-COM) < 1 kOhms
	voltage levels			resistance of open contact for state „H" (IN-COM) > 10 kOhms"
				minimum duration for sensing of change: 200 ms
RS485	input for serial signal RS485	on request		input serves for reading from devices supporting protocol Mod-Bus RTU or Advantech
				connected to terminals next to terminals for channel 15 and 16
				input can work with 16 devices
				galvanically isolated

Note: The inputs are not galvanically isolated (except RS485 input). If you need galvanically isolated inputs then you can choose from a wide range of input modules for monitoring system MS55D. FS means (full scale) and MV (measured value).