Modbus Register
sc200 4/20mA Input Module

V1.02

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
INPUT	40001	Float	2	R		-99999 /99999	The measurement tag
CURRENT	40003	Float	2	R		0 /25.0	The input current reading
RAWCOUNT	40005	Unsigned Integer	1	R		0 /65535	Raw A2D Count
SENSOR NAME	40006	String	8	R/W			Sensor Name
FUNCTION CODE	40014	Unsigned Integer	1	R/W		0 /65535	Function Code
MAXIMUM	40016	Float	2	R/W		-99999 /99999	The max. value of measurement parameter
MINIMUM	40018	Float	2	R/W		-99999 /99999	The min. value of measurement parameter
SET FILTER	40020	Unsigned Integer	1	R/W		0 /60	Filter time constant in seconds
EDIT UNITS	40021	String	3	R/W			Edit Display String
SCALE 0mA/4mA	40024	Unsigned Integer	1	R/W			Select user Scale: 0 -0-20mA. 1- 4-20mA
DATALOG INTRVL	40025	Unsigned Integer	1	R/W			Select Data Data Log Interval: 0 -5sec; 1-30sec; 2-1min; 3-2min; 4-5min; 5-10min; 6-15min; 7-30min; 8-60min
SET RESOLUTION	40026	Unsigned Integer	1	R/W			Set Display Resolution: 0-X.XXX; 1-XX.XX; 2-XXX.X; 3-XXXX
DISPLAY FORMAT	40027	Unsigned Integer	2	R		0 /65535	Display format
CALPNT1	40029	Float	2	R/W		0.0 /25.00	First Calibration Point
CALPNT2	40031	Float	2	R/W		0.0 /25.00	Second Calibration Point
TGCALOFFSET1	40033	Float	2	R/W		-9999 /9999	A2D Offset 1
TGCALOFFSET2	40035	Float	2	R/W		-9999 /9999	A2D Offset 2
TGCALGAIN	40037	Float	2	R/W		-9.9 /9.9	Slope of calibration
CALPOINT0MA	40039	Unsigned Integer	1	R		0 /65535	Cal Point 0 mA
CALPOINT4MA	40040	Unsigned Integer	1	R		0 /65535	Cal Point 4 mA
CALPOINT20MA	40041	Unsigned Integer	1	R		0 /65535	Cal Point 20 mA
SERIAL NUMBER	40042	String	6	R			Instrument Serial Number
SOFTWARE VERS	40048	Float	2	R		0 /99.99	Software Version
FIRMWAREVAR	40050	Unsigned Integer	1	R		0 /65535	The device driver firmware version
DDCONTENT	40051	Unsigned Integer	1	R		0 /65535	The device driver content
BOOTLOADER VER	40052	Float	2	R		0 /99.99	The boot code version
CAL OPTIONS	40054	Unsigned Integer	1	R/W			calibration options
CAL POINT 1	40055	Float	2	R/W		-99999 /99999	The measument value at cal point 1
CAL POINT 2	40057	Float	2	R/W		-99999 /99999	The measurement value at cal point 2
PT1	40059	Unsigned Integer	1	R		0 /0	The cal value tag at cal point 1
PT2	40060	Unsigned Integer	1	R		0 /0	The cal value tag at point 2
EDIT PARAMETER	40061	String	3	R/W			Edit Display String
Measurement Int	40064	Integer	2	R		-999999 /999999	The interger measurement value
RawMeas Int	40066	Unsigned Integer	1	R		0 /25	The integer current value

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ALL Sensors and Analyzer: Classified ERROR Word - Register 49930

Table 2 Error register

Bit	Error	Description
0	Calibration error	Faulty calibration detected
1	Electronic settings error	Faulty electronic calibration/settings
2	Cleaning error	Error in cleaning cycle detected
3	Measuring module error	Error in measuring module detected
4	System initialization	Inconsistent settings detected, reset to factory settings
5	Hardware error	Faulty hardware detected
6	Internal communication error	Internal communication error detected
7	Humidity error	Excessive humidity detected
8	Excessive temperature	Excessive temperature detected
9		
10	Sample feed warning	Error in sample feed detected
11	Questionable calibration warning	Accuracy of previous calibration inadequate
12	Questionable measurement warning	Accuracy of previous measurement inadequate/out of range
13	Safety warning	Safety equipment error detected
14	Reagent warning	Reagent warning, e.g. fill level < min detected
15	Service request warning	Service request detected

ALL Sensors and Analyzer: Classified STATUS Word - Register 49931

Table 3 Status register

Bit	Status 1	Description
0	Calibration activated	Calibration in progress, measurement value not up to date
1	Cleaning activated	Cleaning in progress, measurement value not up to date
2	Service mode activated	Device in "Service" mode, measurement value not up to date
3	General error message	General error detected, refer to error text for details
4	Measurement value channel 0, poor quality	Measurement accuracy is not within specified limits
5	Measurement value channel 0, range short-fall	Measurement value falls short of the specified range
6	Measurement value channel 0, range exceeded	Measurement value exceeds the specified range
7	Measurement value channel 1, poor quality	Measurement accuracy is not within specified limits
8	Measurement value channel 1, range short-fall	Measurement value falls short of the specified range
9	Measurement value channel 1, range exceeded	Measurement value exceeds the specified range
10	Measurement value channel 2, poor quality	Measurement accuracy is not within specified limits
11	Measurement value channel 2, range short-fall	Measurement value falls short of the specified range
12	Measurement value channel 2, range exceeded	Measurement value exceeds the specified range
13	Measurement value channel 3, poor quality	Measurement accuracy is not within specified limits
14	Measurement value channel 3, range short-fall	Measurement value falls short of the specified range
15	Measurement value channel 3, range exceeded	Measurement value exceeds the specified range