

Modbus Register

1200-S sc Combined pH sensor

V1.13

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
pH measurement	40001	Float	2	R			pH measurement
ORP measurement	40003	Float	2	R			ORP measurement
Temperature measurement	40005	Float	2	R			Temperature measurement
Raw pH measurement	40007	Float	2	R			Raw pH measurement
mV Raw measurement	40009	Float	2	R			mV Raw measurement
Raw Temperature measurement	40011	Float	2	R			Raw Temperature measurement
Main Measurement Parameter	40013	Integer	1	R			Main Measurement Tag
Temperature Measurement Param.	40014	Integer	1	R			Temp Measurement Tag
Sensor Name[0]	40015	Integer	1	R/W			Sensor Name[0]
Sensor Name[1]	40016	Integer	1	R/W			Sensor Name[1]
Sensor Name[2]	40017	Integer	1	R/W			Sensor Name[2]
Sensor Name[3]	40018	Integer	1	R/W			Sensor Name[3]
Sensor Name[4]	40019	Integer	1	R/W			Sensor Name[4]
Sensor Name[5]	40020	Integer	1	R/W			Sensor Name[5]
Function code	40021	Integer	1	R			Function code
Next Step	40022	Integer	1	R			Next Step
Password	40023	Pass	1	R/W			Password
Serial Number[0]	40024	Integer	1	R/W			Serial Number[0]
Serial Number[1]	40025	Integer	1	R/W			Serial Number[1]
Serial Number[2]	40026	Integer	1	R/W			Serial Number[2]
pH/ORP toggle	40027	Bit	1	R/W			pH/ORP toggle
Temperature unit toggle	40028	Bit	1	R/W			Temperature unit toggle
pH display format	40029	Bit	1	R/W			pH display format XX.X or XX.XX
Buffer Type	40030	Bit	1	R/W			Buffer type
---	40031	Integer	1	R/W			Internal use
---	40032	Integer	1	R/W			Internal use
Averaging	40033	Integer	1	R/W			Averaging
Automatic/Manual toggle	40034	Bit	1	R/W			Automatic/Manual toggle
Manual Temperature unit	40035	Integer	1	R/W			Manual Temperature unit
Manual Temperature	40036	Float	2	R/W			Manual Temperature
50/60 Hz toggle	40038	Bit	1	R/W			50/60 Hz toggle
Output Mode	40039	Integer	1	R			Internal use
---	40040	Integer	1	R			Internal use
---	40041	Integer	1	R			Internal use
---	40042	Integer	1	R			Internal use
---	40043	Integer	1	R			Internal use
---	40044	Integer	1	R			Internal use
---	40045	Integer	1	R			Internal use
---	40046	Integer	1	R			Internal use
---	40047	Integer	1	R			Internal use
---	40048	Integer	1	R			Internal use
---	40049	Float	2	R			Internal use
---	40051	Float	2	R			Internal use
---	40053	Float	2	R			Internal use
Temperature Offset	40055	Float	2	R			Internal use

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Temperature Offset unit	40057	Integer	1	R			Internal use
pH Buffer 1 Measurement	40058	Float	2	R			Internal use
pH Buffer 2 Measurement	40060	Float	2	R			Internal use
ORP Buffer 1 Measurement	40062	Float	2	R			Internal use
Output Mode	40064	Integer	1	R			Internal use
Software version	40065	Float	2	R			Software version
Serial Number String[0]	40067	Integer	1	R/W			Internal use
Serial Number String[2]	40068	Integer	1	R/W			Internal use
Serial Number String[4]	40069	Integer	1	R/W			Internal use
Serial Number String[6]	40070	Integer	1	R/W			Internal use
Serial Number String[8]	40071	Integer	1	R/W			Internal use
Serial Number String[10]	40072	Integer	1	R/W			Internal use
---	40073	Integer	1	R			Internal use
---	40074	Integer	1	R			Internal use
pH Offset	40075	Float	2	R			pH Calibration Offset
pH Slope	40077	Float	2	R			pH Calibration slope
ORP Offset	40079	Float	2	R			ORP Calibration Offset
ORP Slope	40081	Float	2	R			ORP Calibration slope
Calibration Return Status	40083	Integer	1	R			Calibration Return Status
Time from last Calibration	40084	Integer	1	R			Delay the instrument has been calibrated last time
Time from start up	40085	Integer	1	R			Time the system is running
Time to exchange Humidity bag	40086	Integer	1	R			Time the humidity bag has been used
DriverVersion_float	40087	Float	2	R			Driver version
---	40089	Float	2	R			Internal use
Measurement Logging Interval	40091	Integer	1	R/W			Sensor Data logging interval
Temperature Logging Interval	40092	Integer	1	R/W			Temperature logging interval
Electrode Impedance Meas. Interval	40093	Integer	1	R/W			Impedance measurement interval
Glass Impedance Measurement	40094	Float	2	R			Glass impedance measurement
Reference Impedance Measurement	40096	Float	2	R			Reference impedance measurement

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