

Modbus Register  
37xx sc inductive Conductivity  
external gateway

V3.0

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
tgSensorMeasTag	40001	Integer	1	R			Sensor Measurement Tag
tgCondMeas	40002	Float	2	R			Conductivity Measurement
tgTempMeasTag	40004	Integer	1	R			Temperature Measurement Tag
tgTempDegCMeas	40005	Float	2	R			Temperature Measurement
tgSensorName	40007	String	6	R/W			Sensor Name
tgFuncCode	40013	Integer	1	R/W			Function Code tag
tgNextState	40014	Integer	1	R/W			Next State Tag
tgMeasType	40015	Integer	1	R/W			Measurement Type
tgTempUnits	40016	Integer	1	R/W			Temperature Units-C or F
tgFilter	40017	Integer	1	R/W			Sensor Filter
tgTempElementType	40018	Integer	1	R/W			Temperature Element Type
tgTempUserValueTag	40019	Integer	1	R			Temperature User Value Tag
tgTempUserDegCValue	40020	Float	2	R/W			Temperature User Value
tgTempFactor	40022	Float	2	R/W			Temperature Factor
tgOutputMode	40024	Integer	1	R/W			Output Mode
tgCalLeave	40025	Integer	1	R/W			Cal Leave Mode
tgCalAbort	40026	Integer	1	R/W			Cal Abort Mode
tgSoftwareVersion	40027	String	6	R			Software Version
tgSerialNumber	40033	String	6	R			Serial Number
tgCalCode	40039	Integer	1	R			Cal Code
tgSensorLogInterval	40040	Integer	1	R/W			Sensor Data Log Interval
tgTempLogInterval	40041	Integer	1	R/W			Temperature Data Log Interval
tgProdDate	40042	Unsigned Integer	2	R/W			Production Date
tgLastCalDate	40044	Unsigned Integer	2	R			Last Calibration Date
tgSensorDays	40046	Integer	1	R			Sensor Running Days
tgRejectFrequency	40047	Integer	1	R/W			Reject Frequency
tgDeviceDriver	40048	String	5	R			Device Driver
tgCalWarningDays	40053	Integer	1	R/W			Calibration Warning Days
tgSensorWarningDays	40054	Integer	1	R/W			Sensor Warning Days
tgCondUnits	40055	Integer	1	R/W			Conductivity Units
tgCondCellValue	40056	Float	2	R/W			Conductivity Cell Value
	40058	Float	2	R/W			Conductivity Solution Cal Reference Temperature
	40060	Float	2	R/W			Conductivity Solution Cal Temperature Slope
tgLinearRefTemp	40062	Float	2	R/W			Linear Temp Compensation Reference Temperature
tgLinearTempSlope	40064	Float	2	R/W			Linear Temp Compensation Temperature Slope
tgOffsetCnts	40066	Float	2	R			Sensor Offset Adc Counts
tgCondSolnValue	40068	Float	2	R			Conductivity Value during solution cal
tgCalEditValueTag	40070	Integer	1	R			Cal Edit Value Tag
tgCalEditCondValue	40071	Float	2	R/W			Cal Edit Value
tgCondTCType	40073	Integer	1	R/W			Temperature Compensation Type
tgConcCompType	40074	Integer	1	R/W			Concentration Compensation Type
tgConcBuiltinType	40075	Integer	1	R/W			Conc Built-in Compensation Type
tgTDSFactorType	40076	Integer	1	R/W			TDS Factor Type

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
tgTDSFactor	40077	Float	2	R/W			TDS Factor
tgTblXUnits	40079	Integer	1	R			Table X Units
tgTblYUnits	40080	Integer	1	R			Table Y Units
tgTblXMin	40081	Float	2	R			Table X Minimum Value
tgTblXMax	40083	Float	2	R			Table X Maximum Value
tgTblYMin	40085	Float	2	R			Table Y Minimum Value
tgTblYMax	40087	Float	2	R			Table Y Maximum Value
tgTblXValue	40089	Float	2	R/W			Table X Value
tgTblYValue	40091	Float	2	R/W			Table Y Value
tgCfgTblPt	40093	Integer	1	R/W			Table Point
tgCfgTblAction	40094	Integer	1	R/W			Table Editing Action
tgCfgTblPtX1	40095	Float	2	R/W			Table Pt1 X Value
tgCfgTblPtX2	40097	Float	2	R/W			Table Pt2 X Value
tgCfgTblPtX3	40099	Float	2	R/W			Table Pt3 X Value
tgCfgTblPtX4	40101	Float	2	R/W			Table Pt4 X Value
tgCfgTblPtX5	40103	Float	2	R/W			Table Pt5 X Value
tgCfgTblPtX6	40105	Float	2	R/W			Table Pt6 X Value
tgCfgTblPtX7	40107	Float	2	R/W			Table Pt7 X Value
tgCfgTblPtX8	40109	Float	2	R/W			Table Pt8 X Value
tgCfgTblPtX9	40111	Float	2	R/W			Table Pt9 X Value
tgCfgTblPtX10	40113	Float	2	R/W			Table Pt10 X Value
tgCfgTblPtY1	40115	Float	2	R/W			Table Pt1 YValue
tgCfgTblPtY2	40117	Float	2	R/W			Table Pt2 YValue
tgCfgTblPtY3	40119	Float	2	R/W			Table Pt3 YValue
tgCfgTblPtY4	40121	Float	2	R/W			Table Pt4 YValue
tgCfgTblPtY5	40123	Float	2	R/W			Table Pt5 YValue
tgCfgTblPtY6	40125	Float	2	R/W			Table Pt6 YValue
tgCfgTblPtY7	40127	Float	2	R/W			Table Pt7 YValue
tgCfgTblPtY8	40129	Float	2	R/W			Table Pt8 YValue
tgCfgTblPtY9	40131	Float	2	R/W			Table Pt9 YValue
tgCfgTblPtY10	40133	Float	2	R/W			Table Pt10 YValue
tgSensorADCCnts	40135	Integer	2	R			Senor Adc Counts
tgTempADCCnts	40137	Integer	2	R			Temperature Adc Counts
tgSensorRange	40139	Integer	1	R/W			Sensor Range
tgEditTempValue	40140	Float	2	R/W			Set User Temperature
tgEditTempMin	40142	Float	2	R			Minimum User Temperature value
tgEditTempMax	40144	Float	2	R			Maximum User Temperature Value
rgRawCondValue	40146	Float	2	R			Non-temperature compensated conductivity value
rgCondLowCalValue	40148	Float	2	R/W			conductivity low cal counts
rgCondMidCalValue	40150	Float	2	R/W			conductivity middle cal counts
rgCondHighCalValue	40152	Float	2	R/W			conductivity high cal counts
rgCardCalUsed	40154	Integer	1	R/W			Use factory cal data or card flash cal data

## 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