

Modbus Register 37xx sc inductive Conductivity

V1.08



Be Right™

37xx sc inductive Conductivity V1.08

| 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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|--------------------|----------|-----------|--------|-------------|----------------|-----------|--|
| 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 |