

# Modbus Register Solitax sc

V2.22

Solitax sc V2.22

| Name             | Register | Data Type        | Length | Access Mode | Discrete Range                                       | Min / Max          | Description                       |
|------------------|----------|------------------|--------|-------------|--|--------------------|-----------------------------------|
| TurbidityFNU     | 40001    | float            | 2      | r           |  |                    | Turbidity FNU                     |
| TurbidityNTU     | 40001    | float            | 2      | r           |  |                    | Turbidity NTU                     |
| TurbidityTEF     | 40001    | float            | 2      | r           |  |                    | Turbidity TEF                     |
| TurbidityFTU     | 40001    | float            | 2      | r           |  |                    | Turbidity FTU                     |
| TurbidityEBC     | 40003    | float            | 2      | r           |  |                    | Turbidity EBC                     |
| SolidsMGL        | 40005    | float            | 2      | r           |  |                    | Solids mg/l                       |
| SolidsPPM        | 40005    | float            | 2      | r           |  |                    | Solids ppm                        |
| SolidsGL         | 40007    | float            | 2      | r           |  |                    | Solids g/l                        |
| SolidsPR         | 40009    | float            | 2      | r           |  |                    | Solids %                          |
| reserved         | 40011    | unsigned integer | 1      | r           |  |                    | reserved                          |
| Parameter        | 40012    | unsigned integer | 1      | r/w         | P0 /1  |                    | parameter                         |
| UnitTRB          | 40013    | unsigned integer | 1      | r/w         | U6 /9 /8 /7 /42                                      |                    | Unit Turbidity                    |
| UnitTS           | 40014    | unsigned integer | 1      | r/w         | U0 /1 /2 /10   |                    | Unitd Solids                      |
| OffsetTRB        | 40015    | float            | 2      | r/w         |  | -100 /100          | Turbidity Offset                  |
| FactorTRB        | 40017    | float            | 2      | r/w         |  | 0.1 /10.0          | Turbidity factor                  |
| FactorTS         | 40019    | float            | 2      | r/w         |  | 0.1 /10.0          | Solids factor                     |
| wiperstate       | 40021    | unsigned integer | 1      | r/w         |  | 1 /65535           | wiper register                    |
| ResponseInterval | 40022    | unsigned integer | 1      | r/w         |  | 1 /300             | response time                     |
| CleaningInterval | 40023    | unsigned integer | 1      | r/w         | 1 /5 /15 /30 /60 /240 /720 /1440 /4320 /10080 /65535 |                    | wiper interval                    |
| LogInterval      | 40024    | unsigned integer | 1      | r/w         | 5 /30 /60 /120 /180 /240 /300 /360 /600 /900 /1800   |                    | Logger interval                   |
| Outputmodekal    | 40025    | unsigned integer | 1      | r/w         | 0 /1 /2 /3   |                    | Output when calibrate             |
| Outputmodesrv    | 40026    | unsigned integer | 1      | r/w         | 0 /1 /2 /3   |                    | Output when service               |
| Location         | 40027    | string           | 8      | r/w         |  |                    | Edited name                       |
| ProfilCounter    | 40035    | unsigned integer | 1      | r/w         |  | 0 /40000           | Profi counter                     |
| SerialNumber     | 40036    | string           | 6      | r           |  |                    | serial no                         |
| DateManuCal      | 40042    | date             | 2      | r           |  |                    | date of manufacturing calibration |
| DateUserCaITURB  | 40044    | date             | 2      | r           |  |                    | date of calibration turbidity     |
| DateUserCaISOLID | 40046    | date             | 2      | r           |  |                    | date of calibration solids        |
| VersionAppl      | 40048    | float            | 2      | r           |  | 0 /3.40282347 E+38 | Version application               |
| VersionBoot      | 40050    | float            | 2      | r           |  | 0 /3.40282347 E+38 | Version bootlader                 |
| VersionStruct    | 40052    | unsigned integer | 1      | r           |  | 0 /255             | Version structure probedriver     |
| VersionContent   | 40053    | unsigned integer | 1      | r           |  | 0 /255             | Version register probedriver      |
| VersionFirmware  | 40054    | unsigned integer | 1      | r           |  | 0 /255             | Version firmware probedriver      |
| FormatMinFNU     | 40055    | float            | 2      | r           |  |                    | minimum turbidity FNU             |

Solitax sc V2.22

| Name            | Register | Data Type        | Length | Access Mode | Discrete Range | Min / Max  | Description                         |
|-----------------|----------|------------------|--------|-------------|----------------|------------|-------------------------------------|
| FormatMaxFNU    | 40057    | float            | 2      | r           |                |            | maximum turbidity FNU               |
| FormatMinEBC    | 40059    | float            | 2      | r           |                |            | minimum turbidity EBC               |
| FormatMaxEBC    | 40061    | float            | 2      | r           |                |            | maximum turbidity EBC               |
| FormatMinGL     | 40063    | float            | 2      | r           |                |            | minimum solids g/l                  |
| FormatMaxGL     | 40065    | float            | 2      | r           |                |            | maximum solids g/l                  |
| FormatMinMGL    | 40067    | float            | 2      | r           |                |            | minimum solids mg/l                 |
| FormatMaxMGL    | 40069    | float            | 2      | r           |                |            | maximum solids mg/l                 |
| FormatMinPR     | 40071    | float            | 2      | r           |                |            | minimum solids %                    |
| FormatMaxPR     | 40073    | float            | 2      | r           |                |            | maximum solids %                    |
| SignalsLED      | 40075    | unsigned integer | 1      | r           |                | 0 /1023    | Signal Led                          |
| TRBProcessValue | 40141    | float            | 2      | r           |                | 50.0 /50.0 | Turbidity measurement process value |

## 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              |