

# Modbus Register B7000 TOC/TN/TP

V1.1



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B7000 TOC/TN/TP V1.1

| Name  | Register | Data Type | Length | Access Mode | Discrete Range | Min / Max | Description                       |
|---|----------|-----------|--------|-------------|----------------|-----------|-----------------------------------|
| find complete register list on the next pages | 0        |           | 1      |             |                |           | for B7000 Software min. V02.13.00 |

Modbus Register  
B7000 BioTector TOC TN TP Analyzer  
V 1.1

# B7000 BioTector TOC TN TP Analyzer V 1.1

## REACTION RESULTS Registers

| NAME              | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX          | DESCRIPTION  |
|-------------------|----------|-----------|--------|-------------|------------------|--|
| STREAM_1_RLOG_TIC | 40001    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TIC<br>Last on-line TIC reading                            |
|                   | 40002    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_TOC | 40003    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TOC<br>Last on-line TOC reading                            |
|                   | 40004    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_TC  | 40005    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TC<br>Last on-line TC reading                              |
|                   | 40006    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_VOC | 40007    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: VOC<br>Last on-line VOC reading                            |
|                   | 40008    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_TN  | 40009    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TN<br>Last on-line TN reading                              |
|                   | 40010    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_TP  | 40011    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TP<br>Last on-line TP reading                              |
|                   | 40012    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_COD | 40013    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: COD<br>Last on-line COD reading                            |
|                   | 40014    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_BOD | 40015    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: BOD<br>Last on-line BOD reading                            |
|                   | 40016    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_1_RLOG_TPR | 40025    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 1: TPR<br>Last on-line TPR reading                            |
|                   | 40026    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_TIC | 40029    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TIC<br>Last on-line TIC reading                            |
|                   | 40030    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_TOC | 40031    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TOC<br>Last on-line TOC reading                            |
|                   | 40032    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |

| NAME              | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX          | DESCRIPTION  |
|-------------------|----------|-----------|--------|-------------|------------------|--|
| STREAM_2_RLOG_TC  | 40033    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TC<br>Last on-line TC reading                              |
|                   | 40034    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_VOC | 40035    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: VOC<br>Last on-line VOC reading                            |
|                   | 40036    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_TN  | 40037    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TN<br>Last on-line TN reading                              |
|                   | 40038    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_TP  | 40039    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TP<br>Last on-line TP reading                              |
|                   | 40040    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_COD | 40041    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: COD<br>Last on-line COD reading                            |
|                   | 40042    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_BOD | 40043    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: BOD<br>Last on-line BOD reading                            |
|                   | 40044    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_2_RLOG_TPR | 40053    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 2: TPR<br>Last on-line TPR reading                            |
|                   | 40054    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TIC | 40057    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TIC<br>Last on-line TIC reading                            |
|                   | 40058    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TOC | 40059    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TOC<br>Last on-line TOC reading                            |
|                   | 40060    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TC  | 40061    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TC<br>Last on-line TC reading                              |
|                   | 40062    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_VOC | 40063    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: VOC<br>Last on-line VOC reading                            |
|                   | 40064    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TN  | 40065    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TN<br>Last on-line TN reading                              |
|                   | 40066    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TP  | 40067    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TP<br>Last on-line TP reading                              |
|                   | 40068    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |

| NAME              | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX          | DESCRIPTION  |
|-------------------|----------|-----------|--------|-------------|------------------|--|
| STREAM_3_RLOG_COD | 40069    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: COD<br>Last on-line COD reading                            |
|                   | 40070    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_BOD | 40071    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: BOD<br>Last on-line BOD reading                            |
|                   | 40072    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_3_RLOG_TPR | 40081    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 3: TPR<br>Last on-line TPR reading                            |
|                   | 40082    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TIC | 40085    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TIC<br>Last on-line TIC reading                            |
|                   | 40086    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TOC | 40087    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TOC<br>Last on-line TOC reading                            |
|                   | 40088    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TC  | 40089    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TC<br>Last on-line TC reading                              |
|                   | 40090    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_VOC | 40091    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: VOC<br>Last on-line VOC reading                            |
|                   | 40092    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TN  | 40093    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TN<br>Last on-line TN reading                              |
|                   | 40094    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TP  | 40095    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TP<br>Last on-line TP reading                              |
|                   | 40096    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_COD | 40097    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: COD<br>Last on-line COD reading                            |
|                   | 40098    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_BOD | 40099    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: BOD<br>Last on-line BOD reading                            |
|                   | 40100    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_4_RLOG_TPR | 40103    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 4: TPR<br>Last on-line TPR reading                            |
|                   | 40104    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_TIC | 40107    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TIC<br>Last on-line TIC reading                            |
|                   | 40108    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |

| NAME              | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX          | DESCRIPTION  |
|-------------------|----------|-----------|--------|-------------|------------------|--|
| STREAM_5_RLOG_TOC | 40109    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TOC<br>Last on-line TOC reading                            |
|                   | 40110    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_TC  | 40111    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TC<br>Last on-line TC reading                              |
|                   | 40112    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_VOC | 40113    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: VOC<br>Last on-line VOC reading                            |
|                   | 40114    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_TN  | 40115    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TN<br>Last on-line TN reading                              |
|                   | 40116    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_TP  | 40117    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TP<br>Last on-line TP reading                              |
|                   | 40118    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_COD | 40119    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: COD<br>Last on-line COD reading                            |
|                   | 40120    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_BOD | 40121    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: BOD<br>Last on-line BOD reading                            |
|                   | 40122    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_5_RLOG_TPR | 40125    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 5: TPR<br>Last on-line TPR reading                            |
|                   | 40126    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_6_RLOG_TIC | 40129    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 6: TIC<br>Last on-line TIC reading                            |
|                   | 40130    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_6_RLOG_TOC | 40131    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 6: TOC<br>Last on-line TOC reading                            |
|                   | 40132    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_6_RLOG_TC  | 40133    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 6: TC<br>Last on-line TC reading                              |
|                   | 40134    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_6_RLOG_VOC | 40135    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 6: VOC<br>Last on-line VOC reading                            |
|                   | 40136    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |
| STREAM_6_RLOG_TN  | 40137    | Float     | 2      | R           | < -1.0e6,1.0e6 > | Stream 6: TN<br>Last on-line TN reading                              |
|                   | 40138    |           |        |             |                  | Note: reading this register updates the value in its _TIME register. |

| NAME                   | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|------------------------|----------|-----------|--------|-------------|-----------------------|---|
| STREAM_6_RLOG_TP       | 40139    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Stream 6: TP<br>Last on-line TP reading                               |
|                        | 40140    |           |        |             |                       | Note: reading this register updates the value in its _TIME register.  |
| STREAM_6_RLOG_COD      | 40141    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Stream 6: COD<br>Last on-line COD reading                             |
|                        | 40142    |           |        |             |                       | Note: reading this register updates the value in its _TIME register.  |
| STREAM_6_RLOG_BOD      | 40143    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Stream 6: BOD<br>Last on-line BOD reading                             |
|                        | 40144    |           |        |             |                       | Note: reading this register updates the value in its _TIME register.  |
| STREAM_6_RLOG_TPR      | 40147    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Stream 6: TPR<br>Last on-line TPR reading                             |
|                        | 40148    |           |        |             |                       | Note: reading this register updates the value in its _TIME register.  |
| RLOG_SMPL_STATUS       | 40200    | Float     | 2      | R           | < 0.0,100.0 >         | Sample status<br>Quality of sample, measured by the ultrasonic sensor |
|                        | 40201    |           |        |             |                       | Note: reading this register updates the value in its _TIME register.  |
| RLOG_SMPL_STATUS_TIME  | 40202    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last Sample status reading                              |
|                        | 40203    |           |        |             |                       |   |
| STREAM_1_RLOG_TIC_TIME | 40300    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TIC reading                   |
|                        | 40301    |           |        |             |                       |   |
| STREAM_1_RLOG_TOC_TIME | 40302    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TOC reading                   |
|                        | 40303    |           |        |             |                       |   |
| STREAM_1_RLOG_TC_TIME  | 40304    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TC reading                    |
|                        | 40305    |           |        |             |                       |   |
| STREAM_1_RLOG_VOC_TIME | 40306    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line VOC reading                   |
|                        | 40307    |           |        |             |                       |   |
| STREAM_1_RLOG_TN_TIME  | 40308    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TN reading                    |
|                        | 40309    |           |        |             |                       |   |
| STREAM_1_RLOG_TP_TIME  | 40310    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TP reading                    |
|                        | 40311    |           |        |             |                       |   |
| STREAM_1_RLOG_COD_TIME | 40312    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line COD reading                   |
|                        | 40313    |           |        |             |                       |   |
| STREAM_1_RLOG_BOD_TIME | 40314    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line BOD reading                   |
|                        | 40315    |           |        |             |                       |   |
| STREAM_1_RLOG_TPR_TIME | 40324    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 1:<br>Time, Date of last on-line TPR reading                   |
|                        | 40325    |           |        |             |                       |   |
| STREAM_2_RLOG_TIC_TIME | 40328    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TIC reading                   |
|                        | 40329    |           |        |             |                       |   |
| STREAM_2_RLOG_TOC_TIME | 40330    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TOC reading                   |
|                        | 40331    |           |        |             |                       |   |



| NAME                   | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|------------------------|----------|-----------|--------|-------------|-----------------------|---|
| STREAM_2_RLOG_TC_TIME  | 40332    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TC reading  |
|                        | 40333    |           |        |             |                       |   |
| STREAM_2_RLOG_VOC_TIME | 40334    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line VOC reading |
|                        | 40335    |           |        |             |                       |   |
| STREAM_2_RLOG_TN_TIME  | 40336    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TN reading  |
|                        | 40337    |           |        |             |                       |   |
| STREAM_2_RLOG_TP_TIME  | 40338    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TP reading  |
|                        | 40339    |           |        |             |                       |   |
| STREAM_2_RLOG_COD_TIME | 40340    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line COD reading |
|                        | 40341    |           |        |             |                       |   |
| STREAM_2_RLOG_BOD_TIME | 40342    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line BOD reading |
|                        | 40343    |           |        |             |                       |   |
| STREAM_2_RLOG_TPR_TIME | 40352    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 2:<br>Time, Date of last on-line TPR reading |
|                        | 40353    |           |        |             |                       |   |
| STREAM_3_RLOG_TIC_TIME | 40356    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TIC reading |
|                        | 40357    |           |        |             |                       |   |
| STREAM_3_RLOG_TOC_TIME | 40358    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TOC reading |
|                        | 40359    |           |        |             |                       |   |
| STREAM_3_RLOG_TC_TIME  | 40360    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TC reading  |
|                        | 40361    |           |        |             |                       |   |
| STREAM_3_RLOG_VOC_TIME | 40362    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line VOC reading |
|                        | 40363    |           |        |             |                       |   |
| STREAM_3_RLOG_TN_TIME  | 40364    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TN reading  |
|                        | 40365    |           |        |             |                       |   |
| STREAM_3_RLOG_TP_TIME  | 40366    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TP reading  |
|                        | 40367    |           |        |             |                       |   |
| STREAM_3_RLOG_COD_TIME | 40368    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line COD reading |
|                        | 40369    |           |        |             |                       |   |
| STREAM_3_RLOG_BOD_TIME | 40370    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line BOD reading |
|                        | 40371    |           |        |             |                       |   |
| STREAM_3_RLOG_TPR_TIME | 40380    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 3:<br>Time, Date of last on-line TPR reading |
|                        | 40381    |           |        |             |                       |   |
| STREAM_4_RLOG_TIC_TIME | 40384    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TIC reading |
|                        | 40385    |           |        |             |                       |   |
| STREAM_4_RLOG_TOC_TIME | 40386    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TOC reading |
|                        | 40387    |           |        |             |                       |   |
| STREAM_4_RLOG_TC_TIME  | 40388    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TC reading  |
|                        | 40389    |           |        |             |                       |   |
| STREAM_4_RLOG_VOC_TIME | 40390    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line VOC reading |
|                        | 40391    |           |        |             |                       |   |
| STREAM_4_RLOG_TN_TIME  | 40392    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TN reading  |
|                        | 40393    |           |        |             |                       |   |

| NAME                   | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|------------------------|----------|-----------|--------|-------------|-----------------------|---|
| STREAM_4_RLOG_TP_TIME  | 40394    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TP reading  |
|                        | 40395    |           |        |             |                       |   |
| STREAM_4_RLOG_COD_TIME | 40396    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line COD reading |
|                        | 40397    |           |        |             |                       |   |
| STREAM_4_RLOG_BOD_TIME | 40398    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line BOD reading |
|                        | 40399    |           |        |             |                       |   |
| STREAM_4_RLOG_TPR_TIME | 40402    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 4:<br>Time, Date of last on-line TPR reading |
|                        | 40403    |           |        |             |                       |   |
| STREAM_5_RLOG_TIC_TIME | 40406    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TIC reading |
|                        | 40407    |           |        |             |                       |   |
| STREAM_5_RLOG_TOC_TIME | 40408    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TOC reading |
|                        | 40409    |           |        |             |                       |   |
| STREAM_5_RLOG_TC_TIME  | 40410    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TC reading  |
|                        | 40411    |           |        |             |                       |   |
| STREAM_5_RLOG_VOC_TIME | 40412    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line VOC reading |
|                        | 40413    |           |        |             |                       |   |
| STREAM_5_RLOG_TN_TIME  | 40414    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TN reading  |
|                        | 40415    |           |        |             |                       |   |
| STREAM_5_RLOG_TP_TIME  | 40416    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TP reading  |
|                        | 40417    |           |        |             |                       |   |
| STREAM_5_RLOG_COD_TIME | 40418    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line COD reading |
|                        | 40419    |           |        |             |                       |   |
| STREAM_5_RLOG_BOD_TIME | 40420    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line BOD reading |
|                        | 40421    |           |        |             |                       |   |
| STREAM_5_RLOG_TPR_TIME | 40424    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 5:<br>Time, Date of last on-line TPR reading |
|                        | 40425    |           |        |             |                       |   |
| STREAM_6_RLOG_TIC_TIME | 40428    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TIC reading |
|                        | 40429    |           |        |             |                       |   |
| STREAM_6_RLOG_TOC_TIME | 40430    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TOC reading |
|                        | 40431    |           |        |             |                       |   |
| STREAM_6_RLOG_TC_TIME  | 40432    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TC reading  |
|                        | 40433    |           |        |             |                       |   |
| STREAM_6_RLOG_VOC_TIME | 40434    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line VOC reading |
|                        | 40435    |           |        |             |                       |   |
| STREAM_6_RLOG_TN_TIME  | 40436    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TN reading  |
|                        | 40437    |           |        |             |                       |   |
| STREAM_6_RLOG_TP_TIME  | 40438    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TP reading  |
|                        | 40439    |           |        |             |                       |   |
| STREAM_6_RLOG_COD_TIME | 40440    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line COD reading |
|                        | 40441    |           |        |             |                       |   |
| STREAM_6_RLOG_BOD_TIME | 40442    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line BOD reading |
|                        | 40443    |           |        |             |                       |   |

| NAME                   | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|------------------------|----------|-----------|--------|-------------|-----------------------|---|
| STREAM_6_RLOG_TPR_TIME | 40446    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Stream 6:<br>Time, Date of last on-line TPR reading |
|                        | 40447    |           |        |             |                       |   |



Be Right™

# B7000 BioTector TOC TN TP Analyzer V 1.1

## SETTINGS, CALIBRATION AND DIAGNOSTICS Registers

| NAME             | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX                           | DESCRIPTION  |
|------------------|----------|-----------|--------|-------------|-----------------------------------|--|
| DEVICE_ADDR      | 40500    | integer   | 1      | R/W         | 0x0000-0x00C8                     | Device address on Modbus network.  |
| DEVICE_ID        | 40501    | integer   | 1      | R/W         | 0x0000-0xFFFF                     | Device class ID code.  |
| MANUF_ID         | 40502    | integer   | 1      | R/W         | 0x0000-0x00FF                     | Manufacture ID code.   |
| DEVICE_SERIAL_ID | 40503    | uint48    | 3      | R           | 0x0000000000000-0xFFFFFFFFFFFFFFF | Device serial number.  |
|                  | 40504    |           |        |             |                                   |  |
|                  | 40505    |           |        |             |                                   |  |
| PROTO_REV        | 40506    | integer   | 1      | R           | 0x0000-0x9999                     | Modbus protocol implementation revision, expressed in BCD code.<br>rev AA.BB → 0xAABB  |
| FRMW_REV         | 40507    | integer   | 1      | R           | 0x0000-0x9999                     | Device firmware revision, expressed in BCD code.<br>rev AA.BB → 0xAABB   |
| REGS_MAP_REV     | 40508    | integer   | 1      | R           | 0x0000-0x9999                     | Device Modbus registers map, expressed in BCD code.<br>rev AA.BB → 0xAABB  |
| LOCATION_STR     | 40509    | string    | 8      | R/W         | max. 16chars                      | Device location text info. The string has to be null terminated if shorter than max. size.   |
|                  | 40510    |           |        |             |                                   |  |
|                  | 40511    |           |        |             |                                   |  |
|                  | 40512    |           |        |             |                                   |  |
|                  | 40513    |           |        |             |                                   |  |
|                  | 40514    |           |        |             |                                   |  |
|                  | 40515    |           |        |             |                                   |  |
|                  | 40516    |           |        |             |                                   |  |
| BAUDRATE         | 40517    | integer   | 1      | R/W         | 0x0000-0x0008                     | Indexed device baud rate used on Modbus.<br><br>0 – 1200 bps<br>1 – 2400 bps<br>2 – 4800 bps<br>3 – 9600 bps<br>4 – 14400 bps<br>5 – 19200 bps<br>6 – 38400 bps<br>7 – 57600 bps<br>8 – 115200 bps<br><br>Note: default value should be 7, 57600bps. |
| SYS_TIMEDATE     | 40518    | integer   | 2      | R/W         | 0x00000000-0xFFFFFFFF             | System time & date in seconds elapsed since 1.1.1970.<br><br>Note: this reg can be changed only when system is fully stopped.  |
|                  | 40519    |           |        |             |                                   |  |

| NAME             | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION  |
|------------------|----------|-----------|--------|-------------|-----------------------|--|
| SYS_TIME         | 40520    | integer   | 1      | R/W         | 0x0000-0x3B3B         | System time, encoded in higher/lower bytes.<br>HH:MM → 0xHHMM<br><br>Note: this reg can be changed only when system is fully stopped.  |
| SYS_DATE         | 40521    | integer   | 2      | R/W         | 0x00000000-0x1F0C0833 | System date, encoded in 4 bytes bytes.<br><br>higher word DAY:MON → 0xDDMM<br>lower word YEAR → 0xYYYY<br><br>Note: this reg can be changed only when system is fully stopped. |
|                  | 40522    |           |        |             |                       |  |
| REACT_TIC_RANGE1 | 40550    | Float     | 2      | R           | < 0.0,1000000.0 >     | TIC range 1<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40551    |           |        |             |                       |  |
| REACT_TIC_RANGE2 | 40552    | Float     | 2      | R           | < 0.0,1000000.0 >     | TIC range 2<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40553    |           |        |             |                       |  |
| REACT_TIC_RANGE3 | 40554    | Float     | 2      | R           | < 0.0,1000000.0 >     | TIC range 3<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40555    |           |        |             |                       |  |
| REACT_TOC_RANGE1 | 40556    | Float     | 2      | R           | < 0.0,1000000.0 >     | TOC range 1<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40557    |           |        |             |                       |  |
| REACT_TOC_RANGE2 | 40558    | Float     | 2      | R           | < 0.0,1000000.0 >     | TOC range 2<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40559    |           |        |             |                       |  |
| REACT_TOC_RANGE3 | 40560    | Float     | 2      | R           | < 0.0,1000000.0 >     | TOC range 3<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.  |
|                  | 40561    |           |        |             |                       |  |
| REACT_TC_RANGE1  | 40562    | Float     | 2      | R           | < 0.0,1000000.0 >     | TC range 1<br><br>Note: shown as 0.0 if in the actual analysis mode this result not available.   |
|                  | 40563    |           |        |             |                       |  |

| NAME             | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX           | DESCRIPTION  |
|------------------|----------|-----------|--------|-------------|-------------------|--|
| REACT_TC_RANGE2  | 40564    | Float     | 2      | R           | < 0.0,1000000.0 > | TC range 2   |
|                  | 40565    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TC_RANGE3  | 40566    | Float     | 2      | R           | < 0.0,1000000.0 > | TC range 3   |
|                  | 40567    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TN_RANGE1  | 40568    | Float     | 2      | R           | < 0.0,1000000.0 > | TN range 1   |
|                  | 40569    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TN_RANGE2  | 40570    | Float     | 2      | R           | < 0.0,1000000.0 > | TN range 2   |
|                  | 40571    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TN_RANGE3  | 40572    | Float     | 2      | R           | < 0.0,1000000.0 > | TN range 3   |
|                  | 40573    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TP_RANGE1  | 40574    | Float     | 2      | R           | < 0.0,1000000.0 > | TP range 1   |
|                  | 40575    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TP_RANGE2  | 40576    | Float     | 2      | R           | < 0.0,1000000.0 > | TP range 2   |
|                  | 40577    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TP_RANGE3  | 40578    | Float     | 2      | R           | < 0.0,1000000.0 > | TP range 3   |
|                  | 40579    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TPR_RANGE1 | 40580    | Float     | 2      | R           | < 0.0,1000000.0 > | TPR range 1  |
|                  | 40581    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |
| REACT_TPR_RANGE2 | 40582    | Float     | 2      | R           | < 0.0,1000000.0 > | TPR range 2  |
|                  | 40583    |           |        |             |                   | Note: shown as 0.0 if in the actual analysis mode this result not available. |

| NAME              | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX           | DESCRIPTION   |
|-------------------|----------|-----------|--------|-------------|-------------------|---|
| REACT_TPR_RANGE3  | 40584    | Float     | 2      | R           | < 0.0,1000000.0 > | TPR range 3<br>Note: shown as 0.0 if in the actual analysis mode this result not available.   |
|                   | 40585    |           |        |             |                   |   |
| OXF_ANLS          | 40586    | integer   | 1      | R           | 0x0000-0x07FF     | Show the current oxidation analysis type.<br>bit 0 = TIC+TOC.<br>bit 1 = TC.<br>bit 2 = VOC.<br>bit 3 = TIC+TOCe<br>bit 4 = TCe<br>bit 5 = TIC+TOCb<br>bit 6 = TCB<br>bit 7 = VOCb<br>bit 8 = Fast TC   |
| LQP_ANLS          | 40587    | integer   | 1      | R           | 0x0000-0x0017     | Show the current liquid analysis type.<br>bit 0 = TN.<br>bit 1 = TP.<br>bit 2 = TN+TP<br>bit 3 = TPb<br>bit 4 = TN+TPb<br>bit 5 = TN+TPr+TP<br>bit 6 = TN+TPr   |
| AUTOCAL_PROG      | 40700    | integer   | 1      | R           | 0x0000-0x000F     | bit 0 = off<br>bit 1 = Monday<br>bit 2 = Tuesday<br>bit 3 = Wednesday<br>bit 4 = Thursday<br>bit 5 = Friday<br>bit 6 = Saturday<br>bit 7 = Sunday   |
| AUTOCAL_PROG_TIME | 40701    | integer   | 1      | R           | 0x0000-0x3B3B     | Time of scheduled autocal, encoded in higher/lower bytes.<br>HH:MM → 0xHHMM   |
| CLOG_CAL_SELECT   | 40702    | integer   | 1      | R/W         | 0x0000-0x0004     | 0 = TIC<br>1 = TOC<br>2 = TC<br>3 = TN<br>4 = TP<br>5 = TPR<br><br>Note: this register value defines value of all following CLOG_ registers. By writing into CLOG_CAL_SELECT register updates CLOG_ registers in the similar way the reading of CLOG_CALx_SPAN_STATUS or CLOG_CALx_ZERO does. |

| NAME                  | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|-----------------------|----------|-----------|--------|-------------|-----------------------|---|
| CLOG_CAL1_SPAN_STATUS | 40703    | integer   | 1      | R           | 0x0000-0x007F         | bit 0 = calibration<br>bit 1 = check<br>bit 2 = calibration successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = calculated from TOC/TC result<br>bit 6 = entered by operator<br><br>Note: in case of calibration failure on master range, the derived results status need to be update as well. |
| CLOG_CAL1_SPAN_TIME   | 40704    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last calibration action   |
|                       | 40705    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_SPAN_STATUS register is read.  |
| CLOG_CAL1_SPAN_STD    | 40706    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Standard used<br>Null if bits 4-6 set in "...status" register   |
|                       | 40707    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_SPAN_STATUS register is read.  |
| CLOG_CAL1_SPAN_RSLT   | 40708    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Result found<br>Null if bits 4-6 set in "...status" register  |
|                       | 40709    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_SPAN_STATUS register is read.  |
| CLOG_CAL1_SPAN_FACTOR | 40710    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Span adjustment factor currently in use   |
|                       | 40711    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_SPAN_STATUS register is read.  |
| CLOG_CAL1_ZERO_STATUS | 40712    | integer   | 1      | R/W         | 0x0000-0x007F         | bit 0 = zero calibration<br>bit 1 = zero check<br>bit 2 = zero successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = TIC: no zero required<br>bit 6 = entered by operator   |
| CLOG_CAL1_ZERO_TIME   | 40713    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last zero action  |
|                       | 40714    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_ZERO_STATUS register is read.  |
| CLOG_CAL1_ZERO_OFFSET | 40715    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Zero offset currently in use  |
|                       | 40716    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL1_ZERO_STATUS register is read.  |
| CLOG_CAL2_SPAN_STATUS | 40717    | integer   | 1      | R           | 0x0000-0x007F         | bit 0 = calibration<br>bit 1 = check<br>bit 2 = calibration successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = calculated from TOC/TC result<br>bit 6 = entered by operator  |



| NAME                  | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION  |
|-----------------------|----------|-----------|--------|-------------|-----------------------|--|
| CLOG_CAL2_SPAN_TIME   | 40718    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last calibration action  |
|                       | 40719    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_SPAN_STATUS register is read.   |
| CLOG_CAL2_SPAN_STD    | 40720    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Standard used<br>Null if bits 4-6 set in "...status" register  |
|                       | 40721    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_SPAN_STATUS register is read.   |
| CLOG_CAL2_SPAN_RSLT   | 40722    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Result found<br>Null if bits 4-6 set in "...status" register   |
|                       | 40723    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_SPAN_STATUS register is read.   |
| CLOG_CAL2_SPAN_FACTOR | 40724    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Span adjustment factor currently in use  |
|                       | 40725    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_SPAN_STATUS register is read.   |
| CLOG_CAL2_ZERO_STATUS | 40726    | integer   | 1      | R/W         | 0x0000-0x007F         | bit 0 = zero calibration<br>bit 1 = zero check<br>bit 2 = zero successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = TIC: no zero required<br>bit 6 = entered by operator      |
| CLOG_CAL2_ZERO_TIME   | 40727    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last zero action   |
|                       | 40728    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_ZERO_STATUS register is read.   |
| CLOG_CAL2_ZERO_OFFSET | 40729    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Zero offset currently in use   |
|                       | 40730    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL2_ZERO_STATUS register is read.   |
| CLOG_CAL3_SPAN_STATUS | 40731    | integer   | 1      | R           | 0x0000-0x007F         | bit 0 = calibration<br>bit 1 = check<br>bit 2 = calibration successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = calculated from TOC/TC result<br>bit 6 = entered by operator |
| CLOG_CAL3_SPAN_TIME   | 40732    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last calibration action  |
|                       | 40733    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_SPAN_STATUS register is read.   |
| CLOG_CAL3_SPAN_STD    | 40734    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Standard used<br>Null if bits 4-6 set in "...status" register  |
|                       | 40735    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_SPAN_STATUS register is read.   |

| NAME                  | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|-----------------------|----------|-----------|--------|-------------|-----------------------|---|
| CLOG_CAL3_SPAN_RSLT   | 40736    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Result found<br>Null if bits 4-6 set in "...status" register  |
|                       | 40737    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_SPAN_STATUS register is read.  |
| CLOG_CAL3_SPAN_FACTOR | 40738    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Span adjustment factor currently in use   |
|                       | 40739    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_SPAN_STATUS register is read.  |
| CLOG_CAL3_ZERO_STATUS | 40740    | integer   | 1      | R/W         | 0x0000-0x007F         | bit 0 = zero calibration<br>bit 1 = zero check<br>bit 2 = zero successful<br>bit 3 = result outside band<br>bit 4 = calculated from other range<br>bit 5 = TIC: no zero required<br>bit 6 = entered by operator |
| CLOG_CAL3_ZERO_TIME   | 40741    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Time, Date of last zero action  |
|                       | 40742    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_ZERO_STATUS register is read.  |
| CLOG_CAL3_ZERO_OFFSET | 40743    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | Zero offset currently in use  |
|                       | 40744    |           |        |             |                       | Note: this register value is only updated when CLOG_CAL3_ZERO_STATUS register is read.  |
| PANEL_TEMP            | 40800    | Float     | 2      | R           | < -100.0,150.0 >      | Current Enclosure Temperature, in deg C   |
|                       | 40801    |           |        |             |                       |   |
| ATM_PRESS             | 40802    | Float     | 2      | R           | < 0.0,250.0 >         | Atmospheric pressure from sensor, in kPa  |
|                       | 40803    |           |        |             |                       |   |
| CO2A_ZERO             | 40804    | Float     | 2      | R           | < -1.0e6,1.0e6 >      | CO2 analyser zero setting.  |
|                       | 40805    |           |        |             |                       | Note: this register is reset to 0.0 after power-up and gets set during ANALYZER_ZERO reaction state.  |
| COOLER_TEMP           | 40806    | Float     | 2      | R           | < -100.0,150.0 >      | Cooler temperature, if measured, in deg C   |
|                       | 40807    |           |        |             |                       |   |
| TP_BOILER_TEMP        | 40808    | Float     | 2      | R           | < -100.0,150.0 >      | TP boiler temperature   |
|                       | 40809    |           |        |             |                       |   |
| TP_MIX_BOILER_TEMP    | 40810    | Float     | 2      | R           | < -100.0,150.0 >      | TP mixer boiler temperature   |
|                       | 40811    |           |        |             |                       |   |

| NAME                 | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX               | DESCRIPTION   |
|----------------------|----------|-----------|--------|-------------|-----------------------|---|
| REACT_STREAM_VALVE   | 40816    | integer   | 1      | R           | <0,6 >                | Actual analysis reaction stream valve.<br>0 = no analysis on any stream valve<br>1 = analysis on stream 1 valve<br>2 = analysis on stream 2 valve<br>3 = analysis on stream 3 valve<br>4 = analysis on stream 4 valve<br>5 = analysis on stream 5 valve<br>6 = analysis on stream 6 valve |
| REACT_RANGE          | 40817    | integer   | 1      | R           | <0,3 >                | Actual analysis reaction range.<br>0 = no analysis reaction<br>1 = analysis reaction range 1<br>2 = analysis reaction range 2<br>3 = analysis reaction range 3  |
| ACID_RGNT_STATUS     | 40818    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for Acid   |
| BASE_RGNT_STATUS     | 40819    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for Base   |
| TN_CLEAN_RGNT_STATUS | 40820    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for TN Cleaning fluid  |
| DIW_RGNT_STATUS      | 40821    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for DI water   |
| C_RGNT_STATUS        | 40822    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for Reagent C  |
| D_RGNT_STATUS        | 40823    | integer   | 1      | R           | < 0,999 >             | Estimation of days remaining for Reagent D  |
| REACT_CNTR           | 40824    | integer   | 2      | R           | 0x00000000-0xFFFFFFFF | Reaction counter.   |
|                      | 40825    |           |        |             |                       |   |
| SERVICE_REQ          | 40826    | integer   | 1      | R           | 0x0000-0xFFFF         | Service required in xxx days  |

# B7000 BioTector TOC TN TP Analyzer V 1.1

## ERROR Registers

| NAME             | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX       | DESCRIPTION   |
|------------------|----------|-----------|--------|-------------|---------------|---|
| SYS_ALARM_STATUS | 49930    | integer   | 1      | R           | 0x0000-0x000F | Alarm Status.<br>Bitwise coding:<br>bit 0 = fault.<br>bit 1 = warning.<br>bit 2 = notification.<br>Bit 3 = DW warning.  |
| SYS_COND_GRP     | 49950    | integer   | 1      | R           | 0x0000-0xFFFF | bit 0 = fault archive code 01, Low O2 Flow - EX<br>bit 1 = fault archive code 02, Low O2 Flow - SO<br>..bit 15<br><br>Note: For description of Fault Archive codes please refer to User Manual Section "Troubleshooting of System Faults, Warnings and Notification Events" |
| SYS_COND_GRP     | 49951    | integer   | 1      | R           | 0x0000-0xFFFF | bit 0 = fault archive code 17,<br>bit 1 = fault archive code 18,<br>..bit 15<br><br>Note: For description of Fault Archive codes please refer to User Manual Section "Troubleshooting of System Faults, Warnings and Notification Events"                                   |
|                  |          | ...       | ...    | ...         |               | ...   |
| SYS_COND_GRP     | 49966    | integer   | 1      | R           | 0x0000-0xFFFF | bit 0 = fault archive code 241,<br>bit 1 = fault archive code 242,<br>..bit 15<br><br>Note: For description of Fault Archive codes please refer to User Manual Section "Troubleshooting of System Faults, Warnings and Notification Events"                                 |

## B7000 BioTector TOC TN TP Analyzer V 1.1 STATUS & EXTERNAL CONTROL Registers

| NAME                 | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX       | DESCRIPTION   |
|----------------------|----------|-----------|--------|-------------|---------------|---|
| SYS_OP_STATUS        | 49931    | integer   | 1      | R           | 0x0000-0x003F | Operational Status.<br>Bitwise coding:<br>bit 0 = running.<br>bit 1 = manual running.<br>bit 2 = calibration running.<br>bit 3 = zero running.<br>bit 4 = remote standby activated.<br>bit 5 = maintenance switch activated.  |
| SYS_REM_CTRL         | 49932    | integer   | 1      | R/W         | <0,7>         | System remote control.<br><br>0 = no change<br>1 = system finish & stop<br>2 = analysis start<br>3 = zero cal start<br>4 = zero check start<br>5 = span cal start<br>6 = span check start<br>7 = reagents purge and zero  |
| SYS_REM_CTRL_STANDBY | 49933    | integer   | 1      | R/W         | < 0,1 >       | Set Remote Standby function.<br><br>0 = Modbus remote standby deactivated<br>1 = Modbus remote standby activated<br><br>Note: the content of this register is internally OR'd with REMOTE STANDBY digital input line (if this one is available in the system).  |
| SYS_REM_CTRL_SYNC    | 49934    | integer   | 1      | R           | < 0,1 >       | Synchronization output for remote control operation<br><br>Note: works even without SYNC output defined in system.  |
| SYS_REM_CTRL_RANGE   | 49935    | integer   | 1      | R/W         | < 0,3 >       | Select next range<br><br>0 = not selected / auto<br>1 = range 1<br>2 = range 2<br>3 = range 3<br><br>Note: if this register value is 0 then range is selected by EXT_RANGE_MUX1-2 digital input lines (if these one are available in the system). otherwise the content of this register takes precedence over the digital input lines. |

| NAME                | REGISTER | DATA TYPE | LENGTH | ACCESS MODE | MIN/MAX       | DESCRIPTION  |
|---------------------|----------|-----------|--------|-------------|---------------|--|
| SYS_REM_CTRL_STREAM | 49936    | integer   | 1      | R/W         | 0x0000-0x007f | <p>Next stream to be selected:<br/> bit 0 = Stream 1.<br/> bit 1 = Stream 2.<br/> bit 2 = Stream 3.<br/> bit 3 = Stream 4.<br/> bit 4 = Stream 5.<br/> bit 5 = Stream 6.</p> <p>Note: the content of this register is internally OR'd with STREAM SEL 1-6 digital input lines to activate/deactivate particular stream selection</p> |
| SYS_DEBUG_MODE      | 45000    | integer   | 1      | R/W         | 0x0000-0x0001 | <p>System debug mode register.</p> <p>0 – normal system operation<br/> 1 – system supplies pre-defined Modbus registers values</p>   |