| REGISTER ADDRESS | REGISTER NAME | LOW LIMIT | HIGH <br> LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FREQUENTLY USED REGISTERS |  |  |  |  |  |  |
| 40001 | Counter A Value (Hi word) | -999999999 | 999999999 | 0 | Read/Write |  |
| 40002 | Counter A Value (Lo word) |  |  |  |  |  |
| 40003 | Counter B Value (Hi word) | -999999999 | 999999999 | 0 | Read/Write |  |
| 40004 | Counter B Value (Lo word) |  |  |  |  |  |
| 40005 | Counter C Value (Hi word) | -999999999 | 999999999 | 0 | Read/Write |  |
| 40006 | Counter C Value (Lo word) |  |  |  |  |  |
| 40007 | Rate A Value (Hi word) | N/A | N/A | N/A | Read Only |  |
| 40008 | Rate A Value (Lo word) |  |  |  |  |  |
| 40009 | Rate B Value (Hi word) | N/A | N/A | N/A | Read Only |  |
| 40010 | Rate B Value (Lo word) |  |  |  |  |  |
| 40011 | Rate C Value (Hi word) | N/A | N/A | N/A | Read Only |  |
| 40012 | Rate C Value (Lo word) |  |  |  |  |  |
| 40013 | Max (Hi) Value (Hi word) | -199999 | 999999 | 0 | Read/Write |  |
| 40014 | Max (Hi) Value (Lo word) |  |  |  |  |  |
| 40015 | Min (Lo) Value (Hi word) | -199999 | 999999 | 0 | Read/Write |  |
| 40016 | Min (Lo) Value (Lo word) |  |  |  |  |  |
| 40017 | Setpoint 1 Value (Hi word) | -199999 | 999999 | 100 | Read/Write | Active List (A or B) |
| 40018 | Setpoint 1 Value (Lo word) |  |  |  |  |  |
| 40019 | Setpoint 2 Value (Hi word) | -199999 | 999999 | 200 | Read/Write | Active List (A or B) |
| 40020 | Setpoint 2 Value (Lo word) |  |  |  |  |  |
| 40021 | Setpoint 3 Value (Hi word) | -199999 | 999999 | 300 | Read/Write | Active List (A or B) |
| 40022 | Setpoint 3 Value (Lo word) |  |  |  |  |  |
| 40023 | Setpoint 4 Value (Hi word) | -199999 | 999999 | 400 | Read/Write | Active List (A or B) |
| 40024 | Setpoint 4 Value (Lo word) |  |  |  |  |  |
| 40025 | Counter A Scale Factor (Hi word) | 1 | 999999 | 100000 | Read/Write | Active List (A or B) |
| 40026 | Counter A Scale Factor (Lo word) |  |  |  |  |  |
| 40027 | Counter B Scale Factor (Hi word) | 1 | 999999 | 100000 | Read/Write | Active List (A or B) |
| 40028 | Counter B Scale Factor (Lo word) |  |  |  |  |  |
| 40029 | Counter C Scale Factor (Hi word) | 1 | 999999 | 100000 | Read/Write | Active List (A or B) |
| 40030 | Counter C Scale Factor (Lo word) |  |  |  |  |  |
| 40031 | Counter A Count Load (Hi word) | -199999 | 999999 | 500 | Read/Write | Active List (A or B) |
| 40032 | Counter A Count Load (Lo word) |  |  |  |  |  |
| 40033 | Counter B Count Load (Hi word) | -199999 | 999999 | 500 | Read/Write | Active List (A or B) |
| 40034 | Counter B Count Load (Lo word) |  |  |  |  |  |
| 40035 | Counter C Count Load (Hi word) | -199999 | 999999 | 500 | Read/Write | Active List (A or B) |
| 40036 | Counter C Count Load (Lo word) |  |  |  |  |  |
| 40037 | Setpoint Output Register (SOR) | 0 | 15 | N/A | Read/Write | Status of Setpoint Outputs. Bit State: 0=Off, 1=On. <br> Bit $3=$ S1, Bit $2=$ S2, Bit $1=S 3$, Bit $0=S 4$. <br> Outputs can only be activated/reset with this register when the respective bits in the Manual Mode Register (MMR) are set. |
| 40038 | Manual Mode Register (MMR) | 0 | 31 | 0 | Read/Write | Bit State: $0=$ Auto Mode, 1 = Manual Mode Bit $4=$ S1, Bit $3=$ S2, Bit $2=$ S3, Bit 1 = S4, Bit 0 = Linear Output |



| REGISTER ADDRESS | REGISTER NAME | $\begin{aligned} & \hline \text { LOW } \\ & \text { LIMIT } \end{aligned}$ | HIGH LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counter B |  |  |  |  |  |  |
| 40131 | Counter B Operating Mode | 0 | 7 | 0 | Read/Write | $\begin{array}{lll} 0=\text { None } & 3=\text { Dual Count U/D } & 6=\text { Count } \times 2 \\ 1=\text { Batch } & 4=\text { Dual Quad } \times 1 & 7=\text { Dual Count U/D x2 } \\ 2=\text { Count } & 5=\text { Dual Quad } \times 2 & \end{array}$ |
| 40132 | Counter B Decimal Point | 0 | 5 | 0 | Read/Write | $0=0,1=0.0,2=0.00,3=0.000,4=0.0000,5=0.00000$ |
| 40133 | Counter B Scale Multiplier | 0 | 3 | 0 | Read/Write | $0=1, \quad 1=0.1,2=0.01, \quad 3=10$ |
| 40134 | Counter B Reset Action | 0 | 1 | 0 | Read/Write | $0=$ Reset to Zero, 1 = Reset to Counter B Count Load Value |
| 40135 | Counter B Reset at Power-up | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=$ Yes |
| 40136 | Input B Active Count Edge (Logic) | 0 | 1 | 0 | Read/Write | $0=$ Falling Edge, 1 = Rising Edge |
| 40137 | Counter B Batch Count Source | 0 | 15 | 0 | Read/Write | Bit State: $0=\mathrm{No}, 1=$ Yes <br> Bit $3=S 4$, Bit $2=S 3$, Bit $1=S 2$, Bit $0=S 1$ |
| Counter C |  |  |  |  |  |  |
| 40141 | Counter C Operating Mode | 0 | 6 | 0 | Read/Write | $0=$ None $3=\operatorname{Add}(A+B)$ $6=$ Slave <br> $1=$ Counter A $4=$ Subtract $(A-B)$  <br> $2=$ Counter B $5=$ Batch  |
| 40142 | Counter C Decimal Point | 0 | 5 | 0 | Read/Write | $0=0,1=0.0,2=0.00,3=0.000,4=0.0000,5=0.00000$ |
| 40143 | Counter C Scale Multiplier | 0 | 3 | 0 | Read/Write | $0=1,1=0.1,2=0.01, \quad 3=10$ |
| 40144 | Counter C Reset Action | 0 | 1 | 0 | Read/Write | $0=$ Reset to Zero, 1 = Reset to Counter C Count Load Value |
| 40145 | Counter C Reset at Power-up | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=\mathrm{Yes}$ |
| 40146 | Counter C Batch Count Source | 0 | 15 | 0 | Read/Write | Bit State: $0=$ No, $1=$ Yes <br> Bit $3=S 4$, Bit $2=S 3$, Bit $1=S 2$, Bit $0=S 1$ |
| Rate A |  |  |  |  |  |  |
| 40151 | Rate A Enable | 0 | 1 | 0 | Read/Write | $0=$ No, $1=$ Yes |
| 40152 | Rate A Decimal Point | 0 | 4 | 0 | Read/Write | $0=0,1=0.0,2=0.00,3=0.000,4=0.0000$ |
| 40153 | Rate A Low Cut-Out Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=1$ in least significant digit (disregard decimal point) |
| 40154 | Rate A Low Cut-Out Value (Lo word) |  |  |  |  |  |
| 40155 | Rate A Display Rounding | 0 | 6 | 0 | Read/Write | $0=1,1=2,2=5,3=10,4=20,5=50,6=100$ |
| 40156 | Rate A Scaling Points | 2 | 10 | 2 | Read/Write | Number of Rate A Linearizer Scaling Points |
| 40157 | Scaling Pt. 1 Display Value (Hi word) | 0 | 999999 | 0 | Read/Write | 1 = 1 in least significant digit (disregard decimal point) |
| 40158 | Scaling Pt. 1 Display Value (Lo word) |  |  |  |  |  |
| 40159 | Scaling Pt. 1 Input Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40160 | Scaling Pt. 1 Input Value (Lo word) |  |  |  |  |  |
| 40161 | Scaling Pt. 2 Display Value (Hi word) | 0 | 999999 | 1000 | Read/Write | 1 = 1 in least significant digit (disregard decimal point) |
| 40162 | Scaling Pt. 2 Display Value (Lo word) |  |  |  |  |  |
| 40163 | Scaling Pt. 2 Input Value (Hi word) | 0 | 999999 | 10000 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40164 | Scaling Pt. 2 Input Value (Lo word) |  |  |  |  |  |
| thru | Scaling Pts. 3 thru 9 Values | $\ldots$ | $\ldots$ | $\ldots$ | Read/Write | Registers 40165-40192 hold values for Scaling Points 3 thru 9. |
| 40193 | Scaling Pt. 10 Display Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=1$ in least significant digit (disregard decimal point) |
| 40194 | Scaling Pt. 10 Display Value (Lo word) |  |  |  |  |  |
| 40195 | Scaling Pt. 10 Input Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40196 | Scaling Pt. 10 Input Value (Lo word) |  |  |  |  |  |
| Rate B |  |  |  |  |  |  |
| 40201 | Rate B Enable | 0 | 1 | 0 | Read/Write | $0=$ No, $1=$ Yes |
| 40202 | Rate B Decimal Point | 0 | 4 | 0 | Read/Write | $0=0,1=0.0,2=0.00,3=0.000,4=0.0000$ |
| 40203 | Rate B Low Cut-Out Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=1$ in least significant digit (disregard decimal point) |
| 40204 | Rate B Low Cut-Out Value (Lo word) |  |  |  |  |  |


| REGISTER ADDRESS | REGISTER NAME | $\begin{aligned} & \hline \text { LOW } \\ & \text { LIMIT } \end{aligned}$ | HIGH LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40205 | Rate B Display Rounding | 0 | 6 | 0 | Read/Write | $0=1,1=2,2=5,3=10,4=20,5=50,6=100$ |
| 40206 | Rate B Scaling Points | 2 | 10 | 2 | Read/Write | Number of Rate B Linearizer Scaling Points |
| 40207 | Scaling Pt. 1 Display Value (Hi word) | 0 | 999999 | 0 | Read/Write | 1 = 1 in least significant digit (disregard decimal point) |
| 40208 | Scaling Pt. 1 Display Value (Lo word) |  |  |  |  |  |
| 40209 | Scaling Pt. 1 Input Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40210 | Scaling Pt. 1 Input Value (Lo word) |  |  |  |  |  |
| 40211 | Scaling Pt. 2 Display Value (Hi word) | 0 | 999999 | 1000 | Read/Write | 1 = 1 in least significant digit (disregard decimal point) |
| 40212 | Scaling Pt. 2 Display Value (Lo word) |  |  |  |  |  |
| 40213 | Scaling Pt. 2 Input Value (Hi word) | 0 | 999999 | 10000 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40214 | Scaling Pt. 2 Input Value (Lo word) |  |  |  |  |  |
| thru | Scaling Pts. 3 thru 9 Values | ... | ... | ... | Read/Write | Registers 40215-40242 hold values for Scaling Points 3 thru 9. |
| 40243 | Scaling Pt. 10 Display Value (Hi word) | 0 | 999999 | 0 | Read/Write | 1 = 1 in least significant digit (disregard decimal point) |
| 40244 | Scaling Pt. 10 Display Value (Lo word) |  |  |  |  |  |
| 40245 | Scaling Pt. 10 Input Value (Hi word) | 0 | 999999 | 0 | Read/Write | $1=0.1 \mathrm{~Hz}$ |
| 40246 | Scaling Pt. 10 Input Value (Lo word) |  |  |  |  |  |
| Rate C |  |  |  |  |  |  |
| 40251 | Rate C Calculation | 0 | 1 | 0 | Read/Write | $\begin{aligned} & 0=\text { None } 2=\text { Difference }(A-B) 4=\text { Pct.of Total }(A / A+B) \\ & 1=\text { Sum }(A+B) 3=\text { Ratio }(A / B) 5=\text { Pct.Draw }(A-B / B) \end{aligned}$ |
| 40252 | Rate C Display Multiplier | 0 | 3 | 0 | Read/Write | $0=1,1=10,2=100,3=1000$ |
| 40253 | Rate C Decimal Point | 0 | 4 | 0 | Read/Write | $0=0,1=0.0,2=0.00,3=0.000,4=0.0000$ |
| Rate Update |  |  |  |  |  |  |
| 40254 | Rate Low Update Time | 1 | 9999 | 10 | Read/Write | $1=0.1 \mathrm{Sec}$ (decimal point fixed) |
| 40255 | Rate High Update Time | 2 | 9999 | 20 | Read/Write | $2=0.2 \mathrm{Sec}$ (decimal point fixed) |
| Rate Hi/Lo Capture |  |  |  |  |  |  |
| 40256 | Max (Hi) Capture Value Assignment | 0 | 2 | 0 | Read/Write | 0 = Rate A, 1 = Rate B, 2 = Rate C |
| 40257 | Max (Hi) Capture Delay Time | 0 | 9999 | 10 | Read/Write | $1=0.1 \mathrm{Sec}$ (decimal point fixed) |
| 40258 | Min (Lo) Capture Value Assignment | 0 | 2 | 0 | Read/Write | 0 = Rate A, 1 = Rate B, 2 = Rate C |
| 40259 | Min (Lo) Capture Delay Time | 0 | 9999 | 10 | Read/Write | $1=0.1 \mathrm{Sec}$ (decimal point fixed) |
| User Input / Function Keys |  |  |  |  |  |  |
| 40271 | User Input Active State | 0 | 1 | 0 | Read/Write | 0 = Active Low, 1 = Active High |
| 40272 | User Input 1 Action | 0 | 23 | 0 | Read/Write | $0=$ NO $7=$ Color $14=$ RSt-L $21=$ SPS-L <br> $1=$ PLOC $8=$ d-LEV $15=$ RSt-E $22=$ SPSS-E <br> $2=$ SEL L1 $9=$ d-Cont $16=$ Inhibt $23=$ SPHOLd <br> $3=$ SEL L2 $10=$ d-OFF $17=$ StorE  <br> $4=$ RSt L1 $11=$ LISt $18=$ St-rSt  <br> $5=$ RSt L2 $12=$ Print $19=$ SPr-L  <br> $6=$ RStL12 $13=$ Pr-rSt $20=$ SPr-E  |
| 40273 | User Input 1 Assignment | 0 | 31 | 0 | Read/Write | Counter/Hi/Lo Asn (Bit State: $0=$ No, $1=$ Yes): <br> Bit $0=$ CTA, Bit $1=$ CTB, Bit $2=$ CTC, Bit $3=\mathrm{Hi}$, Bit $4=$ Lo <br> Setpoint Asn: Bit $0=$ S1, Bit $1=$ S2, Bit $2=S 3$, Bit $3=$ S4 <br> List Asn: Bit 3 = Units Mnemonics |
| 40274 | User Input 2 Action | 0 | 23 | 0 | Read/Write | Same as User Input 1 Action |
| 40275 | User Input 2 Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |
| 40276 | User Input 3 Action | 0 | 23 | 0 | Read/Write | Same as User Input 1 Action |
| 40277 | User Input 3 Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |


| REGISTER ADDRESS | REGISTER NAME | LOW LIMIT | HIGH <br> LIMIT | FACTORY SETTING | ACCESS | COMMENTS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40278 | User F1 Key Action | 0 | 22 | 1 | Read/Write | $\begin{aligned} & 0=\text { NO } \\ & 1=\text { SEL L1 } \\ & 2=\text { SEL L2 } \\ & 3=\text { RSt L1 } \\ & 4=\text { RSt L2 } \\ & 5=\text { RSt L12 } \end{aligned}$ | $\begin{aligned} 6 & =\text { Color } \\ 7 & =\mathrm{d} \text {-LEV } \\ 8 & =\mathrm{d}-\text { Cont } \\ 9 & =\mathrm{d}-\mathrm{OFF} \\ 10 & =\text { LISt } \\ 11 & =\text { Print } \end{aligned}$ | $\begin{aligned} & 12=\text { Pr-rSt } \\ & 13=\text { RSt-L } \\ & 14=\text { RSt-E } \\ & 15=\text { Inhibt } \\ & 16=\text { StorE } \\ & 17=\text { St-rSt } \end{aligned}$ | $\begin{aligned} & 18=\text { SPr-L } \\ & 19=\text { SPr-E } \\ & 20=\text { SPS-L } \\ & 21=\text { SPS-E } \\ & 22=\text { SPHOLd } \end{aligned}$ |
| 40279 | User F1 Key Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |  |  |  |
| 40280 | User F2 Key Action | 0 | 22 | 3 | Read/Write | Same as User F1 Key Action |  |  |  |
| 40281 | User F2 Key Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |  |  |  |
| 40282 | User F1 Second Action | 0 | 22 | 0 | Read/Write | Same as User F1 Key Action |  |  |  |
| 40283 | User F1 Second Action Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |  |  |  |
| 40284 | User F2 Second Action | 0 | 22 | 0 | Read/Write | Same as User F1 Key Action |  |  |  |
| 40285 | User F2 Second Action Assignment | 0 | 31 | 0 | Read/Write | Same as User Input 1 Assignment |  |  |  |
| OUTPUT PARAMETERS |  |  |  |  | SEE OUTPUT MODULE FOR PARAMETER DESCRIPTIONS |  |  |  |  |
| Setpoint 1 |  |  |  |  |  |  |  |  |  |
| 40291 | Assignment | 0 | 6 | 0 | Read/Write | $\begin{aligned} & 0=\text { None, } 1=\text { Counter A, } 2=\text { Counter B, } 3=\text { Counter C, } 4=\text { Rate A, } 5=\text { Rate B, } \\ & 6=\text { Rate C } \end{aligned}$ |  |  |  |
| 40292 | Action | 0 | 3 | 0 | Read/Write | $0=$ No, 1 = Latch, 2 = Timed Out, 3 = Boundary |  |  |  |
| 40293 | Output Logic | 0 | 1 | 0 | Read/Write | $0=$ Normal, 1 = Reverse |  |  |  |
| 40294 | Annunciator | 0 | 3 | 0 | Read/Write | 0 = Off, 1 = Normal, 2 = Reverse, 3 = Flash |  |  |  |
| 40295 | Color | 0 | 7 | 0 | Read/Write | $\begin{aligned} & 0=\text { No Change, } 1=\text { Green, } 2=\text { Orange, } 3=\text { Red, } 4=\text { Grn/Org, } 5=\text { Red/Org, } \\ & 6=\text { Red/Grn, } 7=\text { Line } 1 \text { Color } \end{aligned}$ |  |  |  |
| 40296 | Tracking | 0 | 7 | 0 | Read/Write | $\begin{aligned} & 0=\text { No, } 1=S 1,2=S 2,3=S 3,4=S 4,5=\text { CntLd A, } \\ & 6=\text { CntLd B, } 7=\text { CntLd C } \end{aligned}$ |  |  |  |
| 40297 | Power-up State | 0 | 2 | 0 | Read/Write | $0=$ Off, 1 = On, 2 = Save |  |  |  |
| 40298 | Activation Type | 0 | 1 | 0 | Read/Write | 0 = Low Acting, 1 = High Acting |  |  |  |
| 40299 | Standby Operation | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=\mathrm{Yes}$ |  |  |  |
| 40300 | Hysteresis | 0 | 59999 | 0 | Read/Write | 1 = 1 Display Unit |  |  |  |
| 40301 | On Time Delay | 0 | 59999 | 0 | Read/Write | 1 = 0.01 Second |  |  |  |
| 40302 | Off Time Delay | 0 | 59999 | 0 | Read/Write | $1=0.01$ Second |  |  |  |
| 40303 | Output Time-out | 0 | 59999 | 100 | Read/Write | 1 = 0.01 Second |  |  |  |
| 40304 | Rate Timed Output One-Shot | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1$ = Yes |  |  |  |
| 40305 | Counter Auto Reset | 0 | 4 | 0 | Read/Write | $0=$ No, $1=$ Zero at Start, $2=$ CntLd at Start, 3 = Zero at End, 4 = CntLd at End |  |  |  |
| 40306 | Output Reset with Counter Reset | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=\mathrm{Yes}$ |  |  |  |
| 40307 | Output Reset at $\mathrm{Sn}+1$ | 0 | 2 | 0 | Read/Write | $0=$ No, $1=$ Reset at Sn+1 Start, $2=$ Reset at Sn+1 End |  |  |  |
| Setpoint 2 |  |  |  |  |  |  |  |  |  |
| 40311 | Assignment | 0 | 6 | 0 | Read/Write | $\begin{aligned} & 0=\text { None, } 1=\text { Counter A, } 2=\text { Counter B, } 3=\text { Counter C, } \\ & 4=\text { Rate A, } 5=\text { Rate B, } 6=\text { Rate C } \end{aligned}$ |  |  |  |
| 40312 | Action | 0 | 3 | 0 | Read/Write | $0=$ No, 1 = Latch, 2 = Timed Out, 3 = Boundary |  |  |  |
| 40313 | Output Logic | 0 | 1 | 0 | Read/Write | $0=$ Normal, 1 = Reverse |  |  |  |
| 40314 | Annunciator | 0 | 3 | 0 | Read/Write | 0 = Off, 1 = Normal, 2 = Reverse, 3 = Flash |  |  |  |
| 40315 | Color | 0 | 7 | 0 | Read/Write | $0=$ No Change, $1=$ Green, $2=$ Orange, $3=$ Red, $4=$ Grn/Org, $5=$ Red/Org, $6=$ Red/Grn, 7 = Line 1 Color |  |  |  |
| 40316 | Tracking | 0 | 7 | 0 | Read/Write | $\begin{aligned} & 0=\text { No, } 1=S 1,2=S 2,3=S 3,4=S 4,5=\text { CntLd A, } \\ & 6=\text { CntLd B, } 7=\text { CntLd C } \end{aligned}$ |  |  |  |
| 40317 | Power-up State | 0 | 2 | 0 | Read/Write | 0 = Off, 1 = On, 2 = Save |  |  |  |


| REGISTER ADDRESS | REGISTER NAME | $\begin{aligned} & \text { LOW } \\ & \text { LIMIT } \end{aligned}$ | $\begin{aligned} & \hline \text { HIGH } \\ & \text { LIMIT } \end{aligned}$ | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40318 | Activation Type | 0 | 1 | 0 | Read/Write | 0 = Low Acting, 1 = High Acting |
| 40319 | Standby Operation | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1$ = Yes |
| 40320 | Hysteresis | 0 | 59999 | 0 | Read/Write | 1 = 1 Display Unit |
| 40321 | On Time Delay | 0 | 59999 | 0 | Read/Write | 1 - 0.01 Second |
| 40322 | Off Time Delay | 0 | 59999 | 0 | Read/Write | $1=0.01$ Second |
| 40323 | Output Time-out | 0 | 59999 | 100 | Read/Write | 1 = 0.01 Second |
| 40324 | Rate Timed Output One-Shot | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=\mathrm{Yes}$ |
| 40325 | Counter Auto Reset | 0 | 4 | 0 | Read/Write | $0=$ No, $1=$ Zero at Start, $2=$ CntLd at Start, 3 = Zero at End, $4=$ CntLd at End |
| 40326 | Output Reset with Counter Reset | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1=$ Yes |
| 40327 | Output Reset at Sn+1 | 0 | 2 | 0 | Read/Write | $0=$ No, $1=$ Reset at Sn+1 Start, $2=$ Reset at Sn+1 End |
| Setpoint 3 |  |  |  |  |  |  |
| 40331 | Assignment | 0 | 6 | 0 | Read/Write | $\begin{aligned} & 0=\text { None, } 1=\text { Counter A, } 2=\text { Counter B, } 3=\text { Counter C, } \\ & 4=\text { Rate A, } 5=\text { Rate B, } 6=\text { Rate C } \end{aligned}$ |
| 40332 | Action | 0 | 3 | 0 | Read/Write | $0=$ No, 1 = Latch, 2 = Timed Out, 3 = Boundary |
| 40333 | Output Logic | 0 | 1 | 0 | Read/Write | $0=$ Normal, 1 = Reverse |
| 40334 | Annunciator | 0 | 3 | 0 | Read/Write | 0 = Off, 1 = Normal, 2 = Reverse, 3 = Flash |
| 40335 | Color | 0 | 7 | 0 | Read/Write | $0=$ No Change, $1=$ Green, $2=$ Orange, $3=$ Red, $4=$ Grn/Org, $5=$ Red/Org, $6=$ Red/Grn, 7 = Line 1 Color |
| 40336 | Tracking | 0 | 7 | 0 | Read/Write | $\begin{aligned} & 0=\mathrm{No}, 1=\mathrm{S} 1,2=\mathrm{S} 2,3=\mathrm{S} 3,4=\mathrm{S} 4,5=\text { CntLd A, } \\ & 6=\text { CntLd B, } 7=\text { CntLd C } \end{aligned}$ |
| 40337 | Power-up State | 0 | 2 | 0 | Read/Write | $0=$ Off, 1 = On, 2 = Save |
| 40338 | Activation Type | 0 | 1 | 0 | Read/Write | 0 = Low Acting, 1 = High Acting |
| 40339 | Standby Operation | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1$ = Yes |
| 40340 | Hysteresis | 0 | 59999 | 0 | Read/Write | 1 = 1 Display Unit |
| 40341 | On Time Delay | 0 | 59999 | 0 | Read/Write | 1 = 0.01 Second |
| 40342 | Off Time Delay | 0 | 59999 | 0 | Read/Write | 1 = 0.01 Second |
| 40343 | Output Time-out | 0 | 59999 | 100 | Read/Write | 1 = 0.01 Second |
| 40344 | Rate Timed Output One-Shot | 0 | 1 | 0 | Read/Write | $0=\mathrm{No} 1=$, Yes |
| 40345 | Counter Auto Reset | 0 | 4 | 0 | Read/Write | $0=$ No, $1=$ Zero at Start, $2=$ CntLd at Start, 3 = Zero at End, $4=$ CntLd at End |
| 40346 | Output Reset with Counter Reset | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1$ = Yes |
| 40347 | Output Reset at $\mathrm{Sn}+1$ | 0 | 2 | 0 | Read/Write | $0=$ No, $1=$ Reset at Sn+1 Start, $2=$ Reset at Sn+1 End |
| Setpoint 4 |  |  |  |  |  |  |
| 40351 | Assignment | 0 | 6 | 0 | Read/Write | $\begin{aligned} & 0=\text { None, } 1=\text { Counter A, } 2=\text { Counter B, } 3=\text { Counter C, } \\ & 4=\text { Rate A, } 5=\text { Rate B, } 6=\text { Rate C } \end{aligned}$ |
| 40352 | Action | 0 | 3 | 0 | Read/Write | $0=$ No, 1 = Latch, $2=$ Timed Out, 3 = Boundary |
| 40353 | Output Logic | 0 | 1 | 0 | Read/Write | $0=$ Normal, 1 = Reverse |
| 40354 | Annunciator | 0 | 3 | 0 | Read/Write | 0 = Off, 1 = Normal, 2 = Reverse, 3 = Flash |
| 40355 | Color | 0 | 7 | 0 | Read/Write | $0=$ No Change, $1=$ Green, $2=$ Orange, $3=$ Red, $4=$ Grn/Org, $5=$ Red/Org, $6=$ Red/Grn, 7 = Line 1 Color |
| 40356 | Tracking | 0 | 7 | 0 | Read/Write | $\begin{aligned} & 0=\text { No, } 1=S 1,2=S 2,3=S 3,4=S 4,5=\text { CntLd A, } \\ & 6=\text { CntLd B, } 7=\text { CntLd C } \end{aligned}$ |
| 40357 | Power-up State | 0 | 2 | 0 | Read/Write | 0 = Off, 1 = On, 2 = Save |
| 40358 | Activation Type | 0 | 1 | 0 | Read/Write | 0 = Low Acting, 1 = High Acting |
| 40359 | Standby Operation | 0 | 1 | 0 | Read/Write | $0=\mathrm{No}, 1$ = Yes |
| 40360 | Hysteresis | 0 | 59999 | 0 | Read/Write | 1 = 1 Display Unit |
| 40361 | On Time Delay | 0 | 59999 | 0 | Read/Write | 1 = 0.01 Second |



| REGISTER ADDRESS | REGISTER NAME | $\begin{aligned} & \text { LOW } \\ & \text { LIMIT } \end{aligned}$ | HIGH LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40405 | Line 2 Units Mnemonic Digit 2 | 0 | 54 | 0 | Read/Write | Label Mnemonic Mode only. Active List (A or B). |
| 40406 | Line 2 Units Mnemonic Digit 3 | 0 | 54 | 0 | Read/Write |  |
| 40407 | Line 2 Units Mnemonic Digit 4 | 0 | 54 | 0 | Read/Write |  |
| 40408 | Line 2 Units Mnemonic Digit 5 | 0 | 54 | 0 | Read/Write |  |
| 40409 | Line 2 Units Mnemonic Digit 6 | 0 | 54 | 0 | Read/Write |  |
| 40410 | Line 2 Units Mnemonic Digit 7 | 0 | 54 | 0 | Read/Write |  |
| 40411 | Line 2 Units Mnemonic Digit 8 | 0 | 54 | 0 | Read/Write |  |
| 40412 | Line 2 Units Mnemonic Digit 9 (Right) | 0 | 54 | 0 | Read/Write |  |
| 40413 | Line 2 Counter A Display Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-rSt |
| 40414 | Line 2 Counter B Display Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-rSt |
| 40415 | Line 2 Counter C Display Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-rSt |
| 40416 | Line 2 Rate A Display Access | 0 | 1 | 0 | Read/Write | 0=LOC, 1=d-rEAd |
| 40417 | Line 2 Rate B Display Access | 0 | 1 | 0 | Read/Write | 0=LOC, 1=d-rEAd |
| 40418 | Line 2 Rate C Display Access | 0 | 1 | 0 | Read/Write | 0=LOC, 1=d-rEAd |
| 40419 | Line 2 Max (Hi) Value Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-rSt |
| 40420 | Line 2 Min (Lo) Value Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-rSt |
| 40421 | Line 2 List A/B Selection Access | 0 | 5 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-Entr, 3=P-rEAd, 4=P-Entr, 5=HidE |
| 40422 | List A/B Parameter Assignment | 0 | 15 | 0 | Read/Write | Selects List A/B Parameter values (Bit State: $0=$ No, $1=$ Yes): Bit 3 = Units Mnemonics |
| 40423 | Line 2 Setpoint 1 Value Access | 0 | 5 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-Entr, 3=P-rEAd, 4=P-Entr, 5=HidE |
| 40424 | Line 2 Setpoint 2 Value Access | 0 | 5 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-Entr, 3=P-rEAd, 4=P-Entr, 5=HidE |
| 40425 | Line 2 Setpoint 3 Value Access | 0 | 5 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-Entr, 3=P-rEAd, 4=P-Entr, 5=HidE |
| 40426 | Line 2 Setpoint 4 Value Access | 0 | 5 | 0 | Read/Write | 0=LOC, 1=d-rEAd, 2=d-Entr, 3=P-rEAd, 4=P-Entr, 5=HidE |
| 40427 | Line 2 Scale Factor A Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40428 | Line 2 Scale Factor B Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40429 | Line 2 Scale Factor C Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40430 | Line 2 Count Load A Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40431 | Line 2 Count Load B Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40432 | Line 2 Count Load C Display Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40433 | Line 2 Display Color Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40434 | Line 2 Display Intensity Level Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| 40435 | Line 2 Display Contrast Level Access | 0 | 3 | 0 | Read/Write | 0=LOC, 1=P-rEAd, 2=P-Entr, 3=HidE |
| Line 2 User Function Access |  |  |  |  |  |  |
| 40451 | Reset Line 1 Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40452 | Reset Counter A Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40453 | Reset Counter B Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40454 | Reset Counter C Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40455 | Reset Counter A,B,C Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40456 | Reset Max (Hi) Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40457 | Reset Min (Lo) Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40458 | Reset Max \& Min Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| 40459 | Print Request Function Access | 0 | 2 | 0 | Read/Write | 0=LOC, 1=P-Entr, 2=HidE |
| PORT PARAMETERS |  |  |  |  | SEE PORT MODULE FOR PARAMETER DESCRIPTIONS |  |
| USB |  |  |  |  |  |  |
| 40481 | USB Configuration | 0 | 1 | 0 | Read/Write | $0=$ Automatic, $1=$ Serial |


| REGISTER ADDRESS |  | REGISTER NAME | LOW LIMIT | HIGH LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Serial |  |  |  |  |  |  |  |
| 40482 |  | Type | 0 | 2 | 2 | Read/Write | 0 = RLC Protocol (ASCII), 1 = Modbus RTU, 2 = Modbus ASCII |
| 40483 |  | Baud Rate | 0 | 5 | 5 | Read/Write | $0=1200,1=2400,2=4800,3=9600,4=19200,5=38400$ |
| 40484 |  | Data Bits | 0 | 1 | 1 | Read/Write | $0=7$ Bits, $1=8$ Bits |
| 40485 |  | Parity | 0 | 2 | 0 | Read/Write | 0 = None, 1 = Even, 2 = Odd |
| 40486 |  | Address | 0 | 99 | 247 | Read/Write | RLC Protocol: 0-99 |
|  |  | 1 | 247 | Modbus: 1-247 |  |  |
| 40487 |  |  | Transmit Delay | 0 | 250 | 10 | Read/Write | 1 = 0.001 Seconds |
| 40488 |  | Abbreviated Transmission (RLC only) | 0 | 1 | 0 | Read/Write | $0=$ No, 1 = Yes (Not used with Modbus communications type) |
| 40489 |  | Print Options (RLC only) | 0 | 2047 | 1 | Read/Write | $0=$ No, $1=$ Yes (Not used with Modbus communications type) <br> Bit $0=$ Count A, Bit $1=$ Count B, Bit $2=$ Count C, Bit $3=$ Rate A, Bit $4=$ Rate B, <br> Bit $5=$ Rate C, Bit $6=\mathrm{Hi}(\mathrm{max})$, Bit $7=$ Lo (min), Bit $8=$ Scale Factors, Bit $9=$ Count Load Values, Bit $10=$ Setpoint Values |
| 40490 |  | Load Serial Settings | 0 | 1 | 0 | Read/Write | Changing 40481-40487 will not update the PAX2 until this register is written with a 1. After the write, the communicating device must be changed to new PAX2 settings and this register returns to 0 . |
| DISPLAY SELECTION |  |  |  |  |  |  |  |
| 40504 |  | Line 1 Display (Top Line) | 0 | 8 | 1 | Read/Write | $\begin{aligned} & 0=\text { No Display, } 1=\text { Count A, } 2=\text { Count B, } 3=\text { Count C, } 4=\text { Rate A, } 5=\text { Rate B, } 6 \\ & =\text { Rate } C, 7=\operatorname{Max}(\mathrm{Hi}), 8=\operatorname{Min}(\text { Lo }) \end{aligned}$ |
| 40505 |  | Line 2 Display (Bottom Line) | 0 | 13 | 0 | Read/Write | $\begin{aligned} & 0=\text { No Display, } 1=\text { Count A, } 2=\text { Count } B, 3=\text { Count } C, 4=\text { Rate A, } 5=\text { Rate B, } \\ & 6=\text { Rate C, } 7=\mathrm{Max}(\mathrm{Hi}), 8=\operatorname{Min}(\text { Lo }), 9=\text { List } \mathrm{A} / \mathrm{B}, 10=\mathrm{S} 1,11=\mathrm{S} 2,12=\mathrm{S} 3, \\ & 13=\mathrm{S} 4 \end{aligned}$ |
| UNITS MNEMONICS |  |  |  |  |  |  |  |
| List A | List B | Line 1 Units Label Mode (A/B List) |  |  |  |  | SEE USER LIST FUNCTION IN INPUT MODULE FOR DETAILS |
| 40601 | 40801 | Line 1 Units Mnemonic Digit 1 (Left) | 0 | 57 | 0 | Read/Write | Label Mnemonic Mode only. Active List (A or B). |
| 40602 | 40802 | Line 1 Units Mnemonic Digit 2 | 0 | 57 | 0 | Read/Write |  |
| 40603 | 40803 | Line 1 Units Mnemonic Digit 3 (Right) | 0 | 57 | 0 | Read/Write |  |
| List A | List B | Line 1 Units Custom Mode (A/B List) |  |  |  |  |  |
| 40604 | 40804 | Counter A Mnemonic - Digit 1 (Left) | 0 | 57 | 0 | Read/Write | Custom Mnemonic Mode. |
| 40605 | 40805 | Counter A Mnemonic - Digit 2 (Center) | 0 | 57 | 0 | Read/Write |  |
| 40606 | 40806 | Counter A Mnemonic - Digit 3 (Right) | 0 | 57 | 0 | Read/Write |  |
| 40607 | 40807 | Counter B Mnemonic - Digit 1 | 0 | 57 | 0 | Read/Write |  |
| 40608 | 40808 | Counter B Mnemonic - Digit 2 | 0 | 57 | 0 | Read/Write |  |
| 40609 | 40809 | Counter B Mnemonic - Digit 3 | 0 | 57 | 0 | Read/Write |  |
| 40610 | 40810 | Counter C Mnemonic - Digit 1 | 0 | 57 | 0 | Read/Write |  |
| 40611 | 40811 | Counter C Mnemonic - Digit 2 | 0 | 57 | 0 | Read/Write |  |
| 40612 | 40812 | Counter C Mnemonic - Digit 3 | 0 | 57 | 0 | Read/Write |  |
| 40613 | 40813 | Rate A Mnemonic - Digit 1 | 0 | 57 | 0 | Read/Write |  |
| 40614 | 40814 | Rate A Mnemonic - Digit 2 | 0 | 57 | 0 | Read/Write |  |
| 40615 | 40815 | Rate A Mnemonic - Digit 3 | 0 | 57 | 0 | Read/Write |  |
| 40616 | 40816 | Rate B Mnemonic - Digit 1 | 0 | 57 | 0 | Read/Write |  |



| REGISTER <br> ADDRESS |  | REGISTER NAME | LOW <br> LIMIT | HIGH <br> LIMIT | FACTORY <br> SETTING | ACCESS |
| :---: | :--- | :---: | :---: | :---: | :--- | :--- |
| 40654 | 40854 | Counter B Mnemonic - Digit 9 | 0 | 54 | 0 | Read/Write |
| 40655 | 40855 | Counter C Mnemonic - Digit 1 | 0 | 54 | 0 | Read/Write |
| 40656 | 40856 | Counter C Mnemonic - Digit 2 | 0 | 54 | 0 | Read/Write |


| REGISTER ADDRESS |  | REGISTER NAME | $\begin{aligned} & \hline \text { LOW } \\ & \text { LIMIT } \end{aligned}$ | HIGH LIMIT | FACTORY SETTING | ACCESS | COMMENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40699 | 40899 | Max (Hi) Mnemonic - Digit 9 | 0 | 54 | 0 | Read/Write |  |
| 40700 | 40900 | Min (Lo) Mnemonic - Digit 1 | 0 | 54 | 0 | Read/Write |  |
| 40701 | 40901 | Min (Lo) Mnemonic - Digit 2 | 0 | 54 | 0 | Read/Write |  |
| 40702 | 40902 | Min (Lo) Mnemonic - Digit 3 | 0 | 54 | 0 | Read/Write |  |
| 40703 | 40903 | Min (Lo) Mnemonic - Digit 4 | 0 | 54 | 0 | Read/Write |  |
| 40704 | 40904 | Min (Lo) Mnemonic - Digit 5 | 0 | 54 | 0 | Read/Write |  |
| 40705 | 40905 | Min (Lo) Mnemonic - Digit 6 | 0 | 54 | 0 | Read/Write |  |
| 40706 | 40906 | Min (Lo) Mnemonic - Digit 7 | 0 | 54 | 0 | Read/Write |  |
| 40707 | 40907 | Min (Lo) Mnemonic - Digit 8 | 0 | 54 | 0 | Read/Write |  |
| 40708 | 40908 | Min (Lo) Mnemonic - Digit 9 | 0 | 54 | 0 | Read/Write |  |
| 41001-41010 |  | Slave ID | N/A | N/A | N/A | Read Only | $\begin{aligned} & \text { RLC-PAX2D <a><b><0100h><0040h><0040h><0010h> } \\ & <a>=\text { SP Card Status. "0"-No Card, "2"-Dual SP, "4"-Quad SP } \\ & <b>=\text { Linear Card Status. "0"-Not Installled, "1"-Installed } \\ & \text { <0100h> = Version Number (1.00 or higher) } \\ & \text { <0040h><0040h> = } 64 \text { Register Writes/Reads (Max.) } \\ & <0010 \mathrm{~h}>=16 \text { Register GUID/Scratch } \end{aligned}$ |
| 41101-41116 |  | GUID/Scratch | N/A | N/A | N/A | Read/Write | Reserved (may be used in future RLC software) |

