

PM-50 Digital Meters Modbus Communication Table

02/24/2022

LP1187A

Notes:

1. To apply any configuration changes, it is necessary to also write a 1 to the appropriate Apply Configuration (416xx) register.
2. The PM-50 should not be powered down while parameters are being changed. Doing so may corrupt the non-volatile memory resulting in checksum errors.

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
FREQUENTLY USED REGISTERS							
40001	Counter A Value (Hi word)	-999999999	999999999	0	Read/Write		1 = 1 display unit (disregard decimal point)
40002	Counter A Value (Lo word)						
40003	Counter B Value (Hi word)	-999999999	999999999	0	Read/Write		1 = 1 display unit (disregard decimal point)
40004	Counter B Value (Lo word)						
40005	Counter C Value (Hi word)	-999999999	999999999	0	Read/Write		1 = 1 display unit (disregard decimal point)
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 Value (Hi word)	-999999	999999	0	Read/Write		1 = 1 display unit (disregard decimal point)
40014	Max Value (Lo word)						
40015	Min Value (Hi word)	-999999	999999	0	Read/Write		1 = 1 display unit (disregard decimal point)
40016	Min Value (Lo word)						
40017	Setpoint 1 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40018	Setpoint 1 Value (Lo word)						
40019	Setpoint 2 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40020	Setpoint 2 Value (Lo word)						

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40021	Setpoint 3 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40022	Setpoint 3 Value (Lo word)						
40023	Setpoint 4 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40024	Setpoint 4 Value (Lo word)						
40025	Setpoint 5 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40026	Setpoint 5 Value (Lo word)						
40027	Setpoint 6 Value (Hi word)	-999999	999999	100	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40028	Setpoint 6 Value (Lo word)						
40029	Counter A Scale Factor (Hi word)	1	999999	100000	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40030	Counter A Scale Factor (Lo word)						
40031	Counter B Scale Factor (Hi word)	1	999999	100000	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40032	Counter B Scale Factor (Lo word)						
40033	Counter C Scale Factor (Hi word)	1	999999	100000	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40034	Counter C Scale Factor (Lo word)						
40035	Counter A Count Load (Hi word)	-999999	999999	500	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40036	Counter A Count Load (Lo word)						
40037	Counter B Count Load (Hi word)	-999999	999999	500	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40038	Counter B Count Load (Lo word)						
40039	Counter C Count Load (Hi word)	-999999	999999	500	Read/Write		Active List (A or B) 1 = 1 display unit (disregard decimal point)
40040	Counter C Count Load (Lo word)						
40041	Setpoint Output Register (SOR)	0	63	0	Read/Write		Status of Setpoint Outputs. Bit State: 0 = Off, 1 = On. 5 = S5, 4 = S6, 3 = S1, 2 = S2, 1 = S3, 0 = S4 Outputs can only be activated/reset with this register when the respective bits in the Manual Mode Register (MMR) are set.
40042	Manual Mode Register (MMR)	0	127	0	Read/Write		Bit State: 0 = Auto Mode, 1 = Manual Mode 6 = S5, 5 = S6, 4 = S1, 3 = S2, 2 = S3, 1 = S4, 0 = Linear Output
40043	Reset Output Register	0	63	0	Read/Write		Bit State: 1= Reset Output, bit is returned to zero following reset processing; 5 = S5, 4 = S6, 3 = S1, 2 = S2, 1 = S3, 0 = S4
40044	Analog Output Register	-32768	32767	0	Read/Write		This register is written to only if Analog Output is in Manual Mode (MMR bit 0 = 1).

REGISTER ADDRESS		REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40045		List Selection	0	1	0	Read/Write		Sets the Active List. 0 = List A, 1 = List B
List A	List B	Setpoint Values						
40081	40121	Setpoint 1 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40082	40122	Setpoint 1 Value (Lo word)						
40083	40123	Setpoint 2 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40084	40124	Setpoint 2 Value (Lo word)						
40085	40125	Setpoint 3 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40086	40126	Setpoint 3 Value (Lo word)						
40087	40127	Setpoint 4 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40088	40128	Setpoint 4 Value (Lo word)						
40089	40129	Setpoint 5 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40090	40130	Setpoint 5 Value (Lo word)						
40091	40131	Setpoint 6 Value (Hi word)	-999999	999999	100	Read/Write	41613	1 = 1 display unit (disregard decimal point)
40092	40132	Setpoint 6 Value (Lo word)						
List A	List B	Counter Scale Factor Values						
40093	40133	Counter A Scale Factor (Hi word)	1	999999	100000	Read/Write	41611	
40094	40134	Counter A Scale Factor (Lo word)						
40095	40135	Counter B Scale Factor (Hi word)	1	999999	100000	Read/Write	41611	
40096	40136	Counter B Scale Factor (Lo word)						
40097	40137	Counter C Scale Factor (Hi word)	1	999999	100000	Read/Write	41611	
40098	40138	Counter C Scale Factor (Lo word)						
List A	List B	Counter Count Load Values						
40099	40139	Counter A Count Load (Hi word)	-999999	999999	500	Read/Write	41611	
40100	40140	Counter A Count Load (Lo word)						
40101	40141	Counter B Count Load (Hi word)	-999999	999999	500	Read/Write	41611	
40102	40142	Counter B Count Load (Lo word)						
40103	40143	Counter C Scale Factor (Hi word)	-999999	999999	500	Read/Write	41611	
40104	40144	Counter C Scale Factor (Lo word)						

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
Input							
Counter A							
40161	Counter A Operating Mode	0	13	1	Read/Write	41611	0 = None 1 = Count x1 2 = Count x1 w/ Direction 3 = Dual Count x1 w/ Direction 4 = Dual Count x1 Add Add 5 = Dual Count x1 Add Subtract 6 = Quadrature x1 7 = Quadrature x2 8 = Quadrature x4 9 = Dual Count Quadrature x1 10 = Dual Count Quadrature x2 11 = Count x2 12 = Count x2 w/ Direction 13 = Dual Count x2 w/ Direction
40162	Counter A Decimal Point	0	5	0	Read/Write	41611	0 = 0, 1 = 0.0, 2 = 0.00, 3 = 0.000 4 = 0.0000, 5 = 0.00000
40163	Counter A Scale Multiplier	1	4	3	Read/Write	41611	1 = 0.01, 2 = 0.1, 3 = 1, 4 = 10
40164	Counter A Reset Action	1	2	1	Read/Write	41611	1 = Zero, 2 = Count Load
40165	Counter A Reset at Power-up	1	2	1	Read/Write	41611	1 = No, 2 = Yes
40166	Logic Selection for Input	1	3	3	Read/Write	41614	1 = Magnetic, 2 = Source, 3 = Sink
40167	Digital Filter	0	1	0	Read/Write	41614	1 = Enable, 0 = Disable
40168	List Selection	1	2	1	Read/Write	41611	1 = List A, 2 = List B
40169	Input logic Selection for Counter	1	2	2	Read/Write	41614	1 = High Acting, 2 = Low Acting
Counter B							
40191	Counter B Operating Mode	0	7	0	Read/Write	41611	0 = None 1 = Batch 2 = Count x1 3 = Dual Count x1 w/ Direction 4 = Dual Count Quadrature x1 5 = Dual Count Quadrature x2 6 = Count x2 7 = Count x2 w/ Direction
40192	Counter B Decimal Point	0	5	0	Read/Write	41611	0 = 0, 1 = 0.0, 2 = 0.00, 3 = 0.000, 4 = 0.0000 5 = 0.00000
40193	Counter B Scale Multiplier	1	4	3	Read/Write	41611	1 = 0.01, 2 = 0.1, 3 = 1, 4 = 10
40194	Counter B Reset Action	1	2	1	Read/Write	41611	1 = Zero, 2 = Count Load
40195	Counter B Reset at Power-up	1	2	1	Read/Write	41611	1 = No, 2 = Yes
40196	Logic Selection for Input	1	3	3	Read/Write	41614	1 = Magnetic, 2 = Source, 3 = Sink

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS	
40197	Batch Source	0	63	1	Read/Write	41611	0 = Setpoint 1 1 = Setpoint 2 2 = Setpoint 3 3 = Setpoint 4 4 = Setpoint 5 5 = Setpoint 6	
40198	Digital Filter	0	1	0	Read/Write	41614	1 = Enable, 0 = Disable	
40199	List Selection	1	2	1	Read/Write	41611	1 = List A, 2 = List B	
40200	Input logic Selection for Counter	1	2	2	Read/Write	41614	1 = High Acting, 2 = Low Acting	
Counter C								
40221	Counter C Operating Mode	1	7	1	Read/Write	41611	1 = None 2 = Counter A 3 = Counter B 4 = Counter A + Counter B 5 = Counter A - Counter B 6 = Batch 7 = Serial Slave	
40222	Counter C Decimal Point	0	5	0	Read/Write	41611	0 = 0, 1 = 0.0, 2 = 0.00, 3 = 0.000 4 = 0.0000, 5 = 0.00000	
40223	Counter C Scale Multiplier	1	4	3	Read/Write	41611	1 = 0.01, 2 = 0.1, 3 = 1, 4 = 10	
40224	Counter C Reset Action	1	2	1	Read/Write	41611	1 = Zero, 2 = Count Load	
40225	Counter C Reset at Power-up	1	2	1	Read/Write	41611	1 = No, 2 = Yes	
40226	Batch Source	0	63	1	Read/Write	41611	1 = Setpoint 1 2 = Setpoint 2 3 = Setpoint 3 4 = Setpoint 4 5 = Setpoint 5 6 = Setpoint 6	
Rate A	Rate B	Rate						
40251	40351	Rate Enable	0	1	0	Read/Write	41612	0 = Disable, 1 = Enable
40252	40352	Rate Decimal Point	0	4	0	Read/Write	41612	0 = 0, 1 = 0.0, 2 = 0.00, 3 = 0.000, 4 = 0.0000
40253	40353	Rate Low Cut-Out Value (Hi word)	0	999999	0	Read/Write	41612	
40254	40354	Rate B Low Cut-Out Value (Lo word)						
40255	40355	Rate Display Rounding	1	7	1	Read/Write	41612	1 = 1, 2 = 2, 3 = 5, 4 = 10, 5 = 20, 6 = 50, 7 = 100
40256	40356	Rate Scaling Points	2	10	2	Read/Write	41612	2 = 2, 3 = 3, 4 = 4, 5 = 5, 6 = 6, 7 = 7, 8 = 8, 9 = 9, 10 = 10
40257	40357	Scaling Type	1	2	1	Read/Write	41612	1 = Enter Value
40259	40359	Scaling Pt. 1 Display Value (Hi word)	0	999999	0	Read/Write	41612	1 = 1 display unit (disregard decimal point)
40260	40360	Scaling Pt. 1 Display Value (Lo word)						

REGISTER ADDRESS		REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40261	40361	Scaling Pt. 1 Input Value (Hi word)	0	999999	0	Read/Write	41612	1 = 1 in least significant digit (disregard decimal point)
40262	40362	Scaling Pt. 1 Input Value (Lo word)						
thru	thru	Scaling Points 2 thru 10 Values	Read/Write	41612	Registers 40263-40298 and 40363-40398 hold values for Scaling Points 2 thru 10, and follow the same ordering as Scaling Point 1.
40295	40395	Scaling Pt. 10 Display Value (Hi word)	0	999999	9000	Read/Write	41612	1 = 1 display unit (disregard decimal point)
40296	40396	Scaling Pt. 10 Display Value (Lo word)						
40297	40397	Scaling Pt. 10 Input Value (Hi word)	0	999999	90000	Read/Write	41612	1 = 1 in least significant digit (disregard decimal point)
40298	40398	Scaling Pt. 10 Input Value (Lo word)						
Rate C								
40451	Rate C Parameters		1	6	1	Read/Write	41612	1 = None 2 = Sum (A + B) 3 = Difference (A-B) 4 = Ratio (A/B) 5 = Percent of Total A/ (A + B) 6 = Draw (A – B)/B
40452	Rate C Display Multiplier		1	4	1	Read/Write	41612	1 = 1, 2 = 10, 3 = 100, 4 = 1000
40453	Rate C Decimal Point		0	4	0	Read/Write	41612	0 = 0, 1 = 0.0, 2 = 0.00, 3 = 0.000, 4 = 0.0000
Rate Update								
40454	Rate Low Update Time		1	9999	10	Read/Write	41612	Range: 0.1 to 999.9 Sec
40455	Rate High Update Time		1	9999	20	Read/Write	41612	Range: 0.2 to 999.9 Sec
Rate Hi/Lo Capture								
40456	Max Capture Value Assignment		1	3	1	Read/Write	41612	1 = Rate A, 2 = Rate B, 3 = Rate C
40457	Max Capture Delay Time		0	9999	10	Read/Write	41612	Range: 0.0 to 999.9 Sec
40458	Min Capture Value Assignment		1	3	1	Read/Write	41612	1 = Rate A, 2 = Rate B, 3 = Rate C
40459	Min Capture Delay Time		0	9999	10	Read/Write	41612	Range: 0.0 to 999.9 Sec
OUTPUT PARAMETERS								
40501	SSR Logic		1	2	2	Read/Write	41613	Only applicable to Setpoint one and two 1 = Source, 2 = Sink
Setpoint 1								
40502	Assignment		0	6	0	Read/Write	41613	0 = None 1 = Counter A 2 = Counter B 3 = Counter C 4 = Rate A 5 = Rate B 6 = Rate C
40503	Action		0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40504	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40505	Tracking	0	9	0	Read/Write	41613	0 = No 1 = Setpoint 1 2 = Setpoint 2 3 = Setpoint 3 4 = Setpoint 4 5 = Setpoint 5 6 = Setpoint 6 7 = CLd A 8 = CLd B 9 = CLd C
40506	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40507	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40508	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40509	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40510	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40511	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40512	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40513	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40514	Counter Auto Reset	1	5	1	Read/Write	41613	1 = None, 2 = Zero at Start, 3 = CntLd at Start, 4 = Zero at End, 5 = CntLd at End
40515	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40516	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40517	Annunciator	1	4	1	Read/Write	41613	1 = Off, 2 = Normal, 3 = Flash, 4 = Reverse
40518	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40519	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40520	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B
Setpoint 2							
40521	Assignment	0	6	0	Read/Write	41613	Same as Setpoint 1: Assignment
40522	Action	0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary
40523	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40524	Tracking	0	9	0	Read/Write	41613	Same as Setpoint 1: Tracking
40525	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40526	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40527	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40528	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40529	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40530	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40531	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40532	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40533	Counter Auto Reset	1	5	1	Read/Write	41613	Same as Setpoint 1: Counter Auto Reset
40534	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40535	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40536	Annunciator	1	4	1	Read/Write	41613	1 = Off, 2 = Normal, 3 = Flash, 4 = Reverse
40537	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40538	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40539	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B
Setpoint 3							
40540	Assignment	0	6	0	Read/Write	41613	Same as Setpoint 1: Assignment
40541	Action	0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary
40542	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40543	Tracking	0	9	0	Read/Write	41613	Same as Setpoint 1: Tracking
40544	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40545	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40546	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40547	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40548	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40549	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40550	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40551	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40552	Counter Auto Reset	1	5	1	Read/Write	41613	Same as Setpoint 1: Counter Auto Reset
40553	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40554	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40555	Annunciator	1	4	1	Read/Write	41613	1 = Off, 2 = Normal, 3 = Flash, 4 = Reverse
40556	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40557	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40558	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
Setpoint 4							
40559	Assignment	0	6	0	Read/Write	41613	Same as Setpoint 1: Assignment
40560	Action	0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary
40561	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40562	Tracking	0	9	0	Read/Write	41613	Same as Setpoint 1: Tracking
40563	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40564	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40565	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40566	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40567	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40568	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40569	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40570	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40571	Counter Auto Reset	1	5	1	Read/Write	41613	Same as Setpoint 1: Counter Auto Reset
40572	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40573	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40574	Annunciator	1	4	1	Read/Write	41613	1 = Off, 2 = Normal, 3 = Flash, 4 = Reverse
40575	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40576	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40577	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B
Setpoint 5							
40578	Assignment	0	6	0	Read/Write	41613	Same as Setpoint 1: Assignment
40579	Action	0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary
40580	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40581	Tracking	0	9	0	Read/Write	41613	Same as Setpoint 1: Tracking
40582	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40583	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40584	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40585	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40586	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40587	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40588	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40589	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40590	Counter Auto Reset	1	5	1	Read/Write	41613	Same as Setpoint 1: Counter Auto Reset
40591	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40592	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40593	Annunciator	1	4	1	Read/Write	41613	1 = Off, 2 = Normal, 3 = Flash, 4 = Reverse
40594	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40595	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40596	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B
Setpoint 6							
40597	Assignment	0	6	0	Read/Write	41613	Same as Setpoint 1: Assignment
40598	Action	0	3	0	Read/Write	41613	0 = No, 1 = Latched, 2 = Timed Out, 3 = Boundary
40599	Output Logic	1	2	1	Read/Write	41613	1 = Normal, 2 = Reverse
40600	Tracking	0	9	0	Read/Write	41613	Same Setpoint 1: Tracking
40601	Power-up State	1	3	1	Read/Write	41613	1 = Off, 2 = On, 3 = Save
40602	Activation Type	1	2	1	Read/Write	41613	1 = High Acting, 2 = Low Acting
40603	Standby Operation	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40604	Hysteresis	0	59999	2	Read/Write	41613	Range: 0 to 59999
40605	On Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40606	Off Time Delay	0	59999	0	Read/Write	41613	Range: 0.0 to 599.99 Sec
40607	Output Timeout	0	59999	100	Read/Write	41613	Range: 0.0 to 599.99 Sec
40608	Rate Timed Output One- Shot	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40609	Counter Auto Reset	1	5	1	Read/Write	41613	Same as Setpoint 1: Counter Auto Reset
40610	Output Reset with Counter Reset	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40611	Output Reset at Sn + 1	1	2	1	Read/Write	41613	1 = No, 2 = Yes
40612	Annunciator	1	4	1	Read/Write	41613	1 = OFF, 2 = Normal, 3 = Flash, 4 = Reverse
40613	Annunciator Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40614	Setpoint Display Color	1	2	2	Read/Write	41613	1 = Orange, 2 = Red
40615	List Selection	1	2	1	Read/Write	41613	1 = List A, 2 = List B

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
ANALOG OUTPUT PARAMETERS							
40701	Output Type	1	4	1	Read/Write	41601	1 = 4 to 20 mA 2 = 0 to 20 mA 3 = 0 to 10 VDC 4 = -10 to +10 VDC
40702	Output Assignment	0	8	0	Read/Write	41601	0 = None 1 = Counter A 2 = Counter B 3 = Counter C 4 = Rate A 5 = Rate B 6 = Rate C 7 = Max 8 = Min
40703	Low Scale (Hi word)	-199999	999999	0	Read/Write	41601	
40704	Low Scale (Lo word)						
40705	High Scale (Hi word)	-199999	999999	10000	Read/Write	41601	
40706	High Scale (Lo word)						
DISPLAY PARAMETERS							
40801	Brightness	0	100	80	Read/Write	41602	
40802	Enable Sleep Timer	0	1	0	Read/Write	41602	0 = Disable, 1 = Enable
40803	Set Sleep Time (seconds)	1	3600	200	Read/Write	41602	
40804	Large Numeric	0	1	0	Read/Write	41602	0 = Disable, 1 = Enable, User Screen 3 and Screen 4 together as Numeric Widget
40805	Power Save Mode	0	1	1	Read/Write	41602	0 = Disable Dark Theme, 1 = Enable Dark Theme
Common for User Input One & Two							
40901	User Input Active State	1	2	1	Read/Write	41603	SRC/SNK Logic common for User Input One and Two; 1 = Sink, 2 = Source
User Input One							
40902	Function	1	16	1	Read/Write	41603	1 = None 2 = Program Lockout 3 = Print and Reset 4 = Display Brightness 5 = Select Parameter List 6 = Print 7 = Maintained Reset and Inhibit 8 = Momentary Reset 9 = Inhibit 10 = Store 11 = Store and Reset Display 12 = Maintained Output Reset 13 = Momentary Output Reset 14 = Maintained Output Active 15 = Momentary Output Active 16 = Setpoint Hold

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
40903	Reset Selections	0	31	1	Read/Write	41603	Bit map: 0 = Off, true = On
							0 = Counter A 1 = Counter B 2 = Counter C
40904	Output Selections	0	63	1	Read/Write	41603	Bit map: 0 = Off, true = On
							0 = Setpoint 1 1 = Setpoint 2 2 = Setpoint 3
User Input Two							
40906	Function	1	16	1	Read/Write	41603	Same as User Input One: Function
40907	Reset Selections	0	31	1	Read/Write	41603	Same as User Input One: Reset Selections
40908	Output Selections	0	63	1	Read/Write	41603	Same as User Input One: Output Selections
SOFTWARE FUNCTION KEY PARAMETERS							
40951	Function Key Status	0	1	0	Read/Write	41604	0 = Disable, 1 = Enable
F1 Function Key							
40952	Function	1	15	2	Read/Write	41604	1 = None 2 = Print and Reset 3 = Display Brightness 4 = Select Parameter List 5 = Print 6 = Maintained Reset and Inhibit 7 = Momentary Reset 8 = Inhibit 9 = Store
							10 = Store and Reset Display 11 = Maintained Output Reset 12 = Momentary Output Reset 13 = Maintained Output Active 14 = Momentary Output Active 15 = Setpoint Hold
40953	Reset Selections	0	31	1	Read/Write	41604	Bit map: 0 = Off, true = On
							0 = Counter A 1 = Counter B 2 = Counter C
40954	Output Selections	0	63	1	Read/Write	41604	Bit map: 0 = Off, true = On
							0 = Setpoint 1 1 = Setpoint 2 2 = Setpoint 3

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
F2 Function Key							
40955	Function	1	15	2	Read/Write	41604	Same as F1 Function Key: Function
40956	Reset Selections	0	31	1	Read/Write	41604	Same as F1 Function Key: Reset Selections
40957	Output Selections	0	63	1	Read/Write	41604	Same as F1 Function Keys: Output Selections
F3 Function Key							
40958	Function	1	15	2	Read/Write	41604	Same as F1 Function Key: Function
40959	Reset Selections	0	31	1	Read/Write	41604	Same as F1 Function Key: Reset Selections
40960	Output Selections	0	63	1	Read/Write	41604	Same as F1 Function Key: Output Selections
F4 Function Key							
40961	Function	1	15	2	Read/Write	41604	Same as F1 Function Key: Function
40962	Reset Selections	0	31	1	Read/Write	41604	Same as F1 Function Key: Reset Selections
40963	Output Selections	0	63	1	Read/Write	41604	Same as F1 Function Key: Output Selections
RS-485 PARAMETERS							
41001	Communication Protocol/Type	1	4	1	Read/Write	41610	1 = Modbus ASCII, 2 = Modbus RTU, 3 = RLC protocol (ASCII), 4 = None
41002	Baud Rate	1	8	8	Read/Write	41610	1 = 1200, 2 = 2400, 3 = 4800, 4 = 9600, 5 = 19200, 6 = 38400, 7 = 57600, 8 = 115200
41003	Data Bits	1	2	2	Read/Write	41610	1 = 7 Bits, 2 = 8 Bits
41004	Parity	1	3	1	Read/Write	41610	1 = None, 2 = Even, 3 = Odd
41005	Stop Bits	1	2	2	Read/Write	41610	1 = 1 Stop Bit, 2 = 2 Stop Bits
41006	RLC Station Address	0	99	0	Read/Write	41610	RLC Station Address
41007	Modbus Station Address	1	247	247	Read/Write	41610	Modbus Station Address
41008	RLC Transmit Delay	0	250	10	Read/Write	41610	0 – 250 msec
41009	Abbreviated Transmission	0	1	0	Read/Write	41610	0 = No, 1 = Yes. (RLC ASCII only)
41010	Print Option	0	2047	7	Read/Write	41610	0 = Counter A 1 = Counter B 2 = Counter C 3 = Rate A 4 = Rate B 5 = Rate C 6 = Maximum 7 = Minimum 8 = Scale Factor 9 = Counter Load Values 10 = Setpoint Values (RLC ASCII only)

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
RS-232 PARAMETERS							
41101	Communication Protocol/Type	1	4	1	Read/Write	41606	1 = Modbus ASCII, 2 = Modbus RTU, 3 = RLC protocol (ASCII), 4 = None
41102	Baud Rate	1	8	8	Read/Write	41606	1 = 1200, 2 = 2400, 3 = 4800, 4 = 9600, 5 = 19200, 6 = 38400, 7 = 57600, 8 = 115200
41103	Data Bits	1	2	2	Read/Write	41606	1 = 7 Bits, 2 = 8 Bits
41104	Stop Bits	1	2	2	Read/Write	41606	1 = 1 Stop Bit, 2 = 2 Stop Bits
41105	Parity	1	3	1	Read/Write	41606	1 = None, 2 = Even, 3 = Odd
41106	RLC Station Address	0	99	0	Read/Write	41606	RLC Station Address
41107	Modbus Station Address	1	247	247	Read/Write	41606	Modbus Station Address
41108	RLC Transmit Delay	0	250	10	Read/Write	41606	0 – 250 msec
41109	Abbreviated Transmission	0	1	0	Read/Write	41606	0 = No, 1 = Yes. (RLC ASCII only)
41110	Print Option	0	2047	7	Read/Write	41606	0 = Counter A 1 = Counter B 2 = Counter C 3 = Rate A 4 = Rate B 5 = Rate C 6 = Maximum 7 = Minimum 8 = Scale Factor 9 = Counter Load Values 10 = Setpoint Values (RLC ASCII only)
Screen 1							
41201	Display Style	1	6	2	Read/Write	41605	1 = None, 2 = Gauge, 4 = Setpoint Status, 5 = Numeric, 6 = Max Min Monitor
41202	Signal Type	1	2	1	Read/Write	41605	1 = Counter, 2 = Rate
41203	Output Selection	0	63	7	Read/Write	41605	Bit map: 0 = Off, true = On 0 = Setpoint 1 3 = Setpoint 4 1 = Setpoint 2 4 = Setpoint 5 2 = Setpoint 3 5 = Setpoint 6
41204	Counter Selection	0	7	1	Read/Write	41605	0 = Counter A, 1 = Counter B, 2 = Counter C
41205	Rate Selection	0	31	1	Read/Write	41605	0 = Rate A, 1 = Rate B, 2 = Rate C, 3 = Hi, 4 = Lo
41206	Scroll Period	3	15	5	Read/Write	41605	Scroll update time
41207	Color Band 1	1	4	4	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41208	Percentage Band 1	0	100	20	Read/Write	41605	
41209	Color Band 2	1	4	3	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41210	Percentage Band 2	0	100	60	Read/Write	41605	

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
41211	Color Band 3	1	4	2	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41212	Percentage Band 3	0	100	100	Read/Write	41605	
41213	Minimum (Hi word)	-999999999	999999999	0	Read/Write	41605	Minimum value for display.
41214	Minimum (Lo word)						
41215	Maximum (Hi word)	-999999999	999999999	200	Read/Write	41605	Maximum value for display.
41216	Maximum (Lo word)						
Screen 2							
41301	Display Style	1	6	5	Read/Write	41605	1 = None, 2 = Gauge, 4 = Setpoint Status, 5 = Numeric, 6 = Max Min Monitor
41302	Signal Type	1	2	1	Read/Write	41605	1 = Counter, 2 = Rate
41303	Output Selection	0	63	7	Read/Write	41605	Bit map: 0 = Off, true = On 0 = Setpoint 1 3 = Setpoint 4 1 = Setpoint 2 4 = Setpoint 5 2 = Setpoint 3 5 = Setpoint 6
41304	Counter Selection	0	7	1	Read/Write	41605	0 = Counter A, 1 = Counter B, 2 = Counter C
41305	Rate Selection	0	31	1	Read/Write	41605	0 = Rate A, 1 = Rate B, 2 = Rate C, 3 = Hi, 4 = Lo
41306	Scroll Period	3	15	5	Read/Write	41605	Scroll update time
41307	Color Band 1	1	4	4	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41308	Percentage Band 1	0	100	20	Read/Write	41605	
41309	Color Band 2	1	4	3	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41310	Percentage Band 2	0	100	60	Read/Write	41605	
41311	Color Band 3	1	4	2	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41312	Percentage Band 3	0	100	100	Read/Write	41605	
41313	Minimum (Hi word)	-999999999	999999999	0	Read/Write	41605	Minimum value for display.
41314	Minimum (Lo word)						
41315	Maximum (Hi word)	-999999999	999999999	200	Read/Write	41605	Maximum value for display.
41316	Maximum (Lo word)						
41317	Color Band For Numeric	0	1	0	Read/Write	41605	0 = Disable, 1 = Enable, Disable / Enable Color Band and Progress bar under Numeric Widget
Screen 3							
41401	Display Style	1	5	4	Read/Write	41605	1 = None, 2 = Gauge, 4 = Setpoint Status, 5 = Numeric, 6 = Max Min Monitor

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
41402	Signal Type	1	2	1	Read/Write	41605	1 = Counter, 2 = Rate
41403	Output Selection	0	63	7	Read/Write	41605	Bit map: 0 = Off, true = On 0 = Setpoint 1 3 = Setpoint 4 1 = Setpoint 2 4 = Setpoint 5 2 = Setpoint 3 5 = Setpoint 6
41404	Counter Selection	0	7	1	Read/Write	41605	0 - Counter A, 1 - Counter B, 2 - Counter C
41405	Rate Selection	0	31	1	Read/Write	41605	0 = Rate A, 1 = Rate B, 2 = Rate C, 3 = Hi, 4 = Lo
41406	Scroll Period	3	15	5	Read/Write	41605	Scroll update time
41407	Color Band 1	1	4	4	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41408	Percentage Band 1	0	100	20	Read/Write	41605	
41409	Color Band 2	1	4	3	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41410	Percentage Band 2	0	100	60	Read/Write	41605	
41411	Color Band 3	1	4	2	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41412	Percentage Band 3	0	100	100	Read/Write	41605	
41413	Minimum (Hi word)	-999999999	999999999	0	Read/Write	41605	Minimum value for display.
41414	Minimum (Lo word)						
41415	Maximum (Hi word)	-999999999	999999999	200	Read/Write	41605	Maximum value for display.
41416	Maximum (Lo word)						
41417	Color Band For Numeric	0	1	0	Read/Write	41605	0 = Disable, 1 = Enable, Disable / Enable Color Band and Progress bar under Numeric Widget
Screen 4							
41501	Display Style	1	6	6	Read/Write	41605	1 = None, 2 = Gauge, 4 = Setpoint Status, 5 = Numeric, 6 = Max Min Monitor
41502	Signal Type	1	2	1	Read/Write	41605	1 = Counter, 2 = Rate
41503	Output Selection	0	63	7	Read/Write	41605	Bit map: 0 = Off, true = On 0 = Setpoint 1 3 = Setpoint 4 1 = Setpoint 2 4 = Setpoint 5 2 = Setpoint 3 5 = Setpoint 6
41504	Counter Selection	0	7	1	Read/Write	41605	0 = Counter A, 1 = Counter B, 2 = Counter C
41505	Rate Selection	0	31	1	Read/Write	41605	0 = Rate A, 1 = Rate B, 2 = Rate C, 3 = Hi, 4 = Lo
41506	Scroll Period	3	15	5	Read/Write	41605	Scroll update time
41507	Color Band 1	1	4	4	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41508	Percentage Band 1	0	100	20	Read/Write	41605	

REGISTER ADDRESS	REGISTER NAME	LOW LIMIT	HIGH LIMIT	FACTORY SETTING	ACCESS	CONFIG. REGISTER	COMMENTS
41509	Color Band 2	1	4	3	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41510	Percentage Band 2	0	100	60	Read/Write	41605	
41511	Color Band 3	1	4	2	Read/Write	41605	1 = Red, 2 = Blue, 3 = Green, 4 = Yellow
41512	Percentage Band 3	0	100	100	Read/Write	41605	
41513	Minimum (Hi word)	-999999999	999999999	0	Read/Write	41605	Minimum value for display.
41514	Minimum (Lo word)						
41515	Maximum (Hi word)	-999999999	999999999	200	Read/Write	41605	Maximum value for display.
41516	Maximum (Lo word)						
41517	Color Band For Numeric	0	1	0	Read/Write	41605	0 = Disable, 1 = Enable, Disable / Enable Color Band and Progress bar under Numeric Widget

Apply Subsystem Changes

To apply configuration, a 1 needs to be written to the corresponding configuration register. Values other than 1 will be ignored and a NAK will be sent back.

41601	Apply analog output configuration				Write		
41602	Apply display configuration				Write		
41603	Apply hardware key configuration				Write		
41604	Apply software key configuration				Write		
41605	Apply screen configuration				Write		
41606	Apply RS232 configuration				Write		
41610	Apply RS485 configuration				Write		
41611	Apply counter configuration				Write		
41612	Apply rate configuration				Write		
41613	Apply digital setpoint configuration				Write		
41614	Apply digital input configuration				Write		
Factory Service							
41701-41710	Slave ID				Read-only		