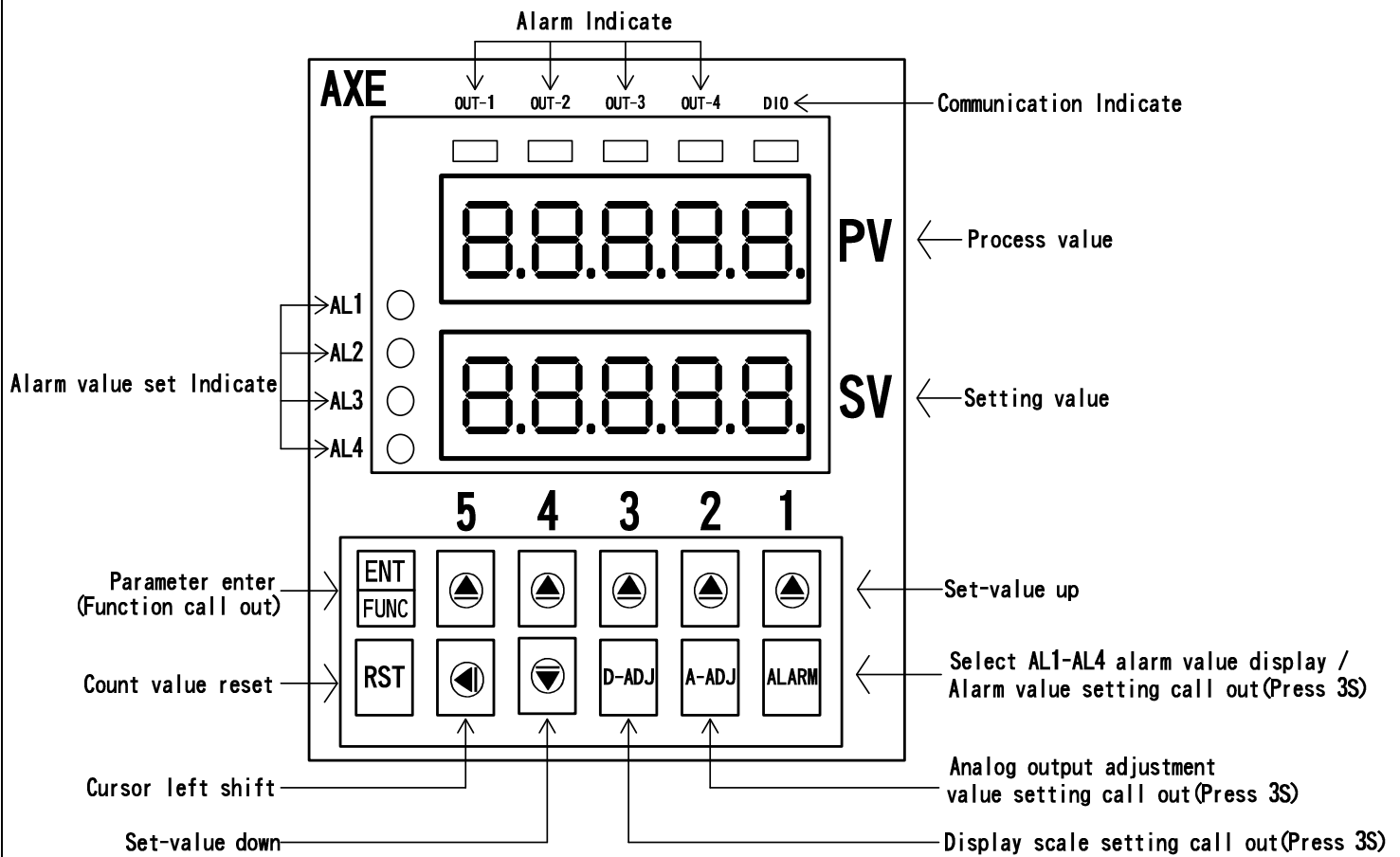


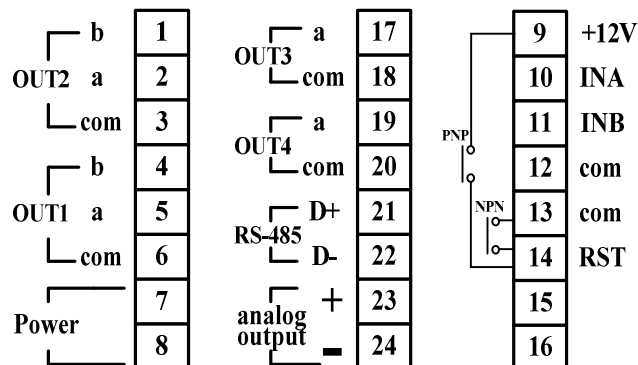
■ Features

- ⊙ Accept more type sensors(switch,encoder,proximity switch,...etc)finish length/flow control
- ⊙ Accept input rates up to 50KHz
- ⊙ Readout range(-19999~99999)
- ⊙ NPN/PNP count input type can be modified
- ⊙ Five counting modes,Front/after edge Up,Down,Up/Down, direct-Up/Down ,Quadrature-Up/Down can be modified
- ⊙ Power down saving
- ⊙ Decimal Point can be modified
- ⊙ Input scaling multiplied 0.0001 to 9.9999 can be modified
- ⊙ Reset by panel or connect terminal
- ⊙ Quadrature sensing up to 4 times resolution
- ⊙ 16BIT DAC analog output can be modified,
- ⊙ Four alarm function
- ⊙ 0.4" highlight display
- ⊙ RS485 Communication interface,Protocol MODBUS RTU MODE
- ⊙ BAUD RATE:19200/9600/4800/2400
- ⊙ Man-machine interface,easy to operate
- ⊙ EEPROM Saving,data safekeeping about 10 years
- ⊙ Modified inside parameter,must have pass code
- ⊙ Protection class NEMA4/IP67

■ Name Of Parts



■ Connection Diagram



Key Introduce	Operation Manual
Ⓜ Key Function	1. In normal display, The key function is call out setting group 2. In parameter setting page, The key function is data Enter , and goto next page
ALARM Key Function	In normal display, 1. call out AL1 setting page(Press key about 3 sec) 2. select AL1~AL4 alarm value display in SV(Press key about 0.2 sec)
D-ADJ Key Function	In normal display, call out SCALE setting page(Press key about 3 sec)
A-ADJ Key Function	In normal display, call out Azero & Aspan setting page(Press key about 3 sec)
RST Key Function	Count value reset
◀ Key Function	Into parameter setting page,the parameter mark&data is alternate display,If need modify data can press ◀ key into setting procedure.The display is lock parameter data, this time must let off key about 0.2 sec,press again,the cursor(twinkle express)is cycle moving left.(Key Response about 0.2 sec)
Each ▲ Key Function	Into parameter setting page, the parameter mark&data is alternate display, If need modify data can press each ▲ key into setting procedure, The display is lock parameter data, this time must let off key about 0.2 sec, press again, the parameter data will increment. (Key Response about 0.2 sec)
▼ Key Function	Into parameter setting page, the parameter mark&data is alternate display, If need modify data can press ▼ key into setting procedure, The display is lock parameter data, this time must let off key about 0.2 sec, press again the parameter data will decrement. (Key Response about 0.2 sec)
◀&▼ Key Function	In setting group or setting page,Press ◀&▼ key return normal display, but if in setting page the modify data will be lost
No Key in anything	In setting group or setting page no key in anything about 2 minutes, return normal display

■ Inside parameter operate procedure

Step	Parameter Mark Description	Parameter Mark	Operation Manual
1	Normal display	1 2 3 4 5	Press Ⓜ/FUNC key into P.CODE setting page
2	P.CODE(Pass code input page) Default=0	P. C O D E	1.Key in 5 digit pass code with per digit ▲&▼&◀ key 2.Press Ⓜ key, If the pass code is correct then into setting group,otherwise return normal display
		0 0 0 0 0	
3	SYS(System Setting Group)	S Y S	1. Select setting group with ◀ key 2. Press Ⓜ key into setting page of selection setting group
	ROP(Alarm output Setting Group)	r o P	
	AOP(Analog output Setting Group)	A o P	
	DOP(Communication setting group)	d o P	
4	SYS(System setting group)	S Y S	1.Press ◀ key decide SYS setting group , Press Ⓜ key into DP setting Page
4-1	DP(Decimal Point setting page) Default = 0	d P	1. Decide decimal point position with digit 1 ▲ or ▼ key (0 to 4) 2. Press Ⓜ key enter data and into C-I-T setting page
		0	
4-2	C-I-T(Count Input Type) Default = NPN	C - I - T	1. Decide Count Input Type with digit 1 ▲ or ▼ key (NPN, PNP) 2. Press Ⓜ key enter data and into I-MODE setting page
		r P n	
4-3	I-MODE(Input Mode) Default = 1U2D	I - M O D E	1. Decide input mode with digit 1 ▲ or ▼ key (1U2G/1D2G/1U2D/1P2D/1A2B) 2. Press Ⓜ key enter data and into C-R-S setting page
		1 U 2 D	
4-4	C-R-S(Count Rates Select) Default = 50KHz	C - R - S	1. Decide Count Rates Select with digit 1 ▲ or ▼ key (50Hz,50KHz) 2. Press Ⓜ key enter data and into RST-T setting page
		S 0 P	
4-5	RST-T(Reset Time) Default = 20mS	r S T - T	1. Decide reset time with digit 1 ▲ or ▼ key(1mS, 20mS) 2. Press Ⓜ key enter data and into CODE setting page
		2 0 m S	
4-6	CODE(Pass Code) Default = 0	C O D E	1. Decide pass code with per digit ▲&▼&◀ key(0~99999) 2. Press Ⓜ key enter data and into LOCK setting page
		0 0 0 0 0	
4-7	LOCK(Panel Lock) Default = NO	L O C K	1. Decide panel lock with digital 1 ▲&▼ key(NO or YES) 2. Press Ⓜ key enter data and return SYS setting group
		r o	
5	ROP(Alarm setting group)	r o P	Press ◀ key decide ROP setting group , press Ⓜ key into ACT1 setting page
5-1	ACT1(Alarm 1 Active) Default=HI	A C T 1	1. Decide Alarm 1 Active with digital 1 ▲&▼ key(HI or LO) 2. Press Ⓜ key enter data and into ACT2 setting page
		H I	
5-2	ACT2(Alarm 2 Active) Default=HI	A C T 2	1. Decide Alarm 2 Active with digital 1 ▲&▼ key(HI or LO) 2. Press Ⓜ key enter data and into ACT3 setting page
		H I	

5-3	ACT1(Alarm 3 Active) Default=HI	ACT1	1. Decide Alarm 3 Active with digital 1▲&▼key(HI or LO)
		HI	2.PressⓂkey enter data and into ACT4 setting page
5-4	ACT2(Alarm 4 Active) Default=HI	ACT4	1. Decide Alarm 4 Active with digital 1▲&▼key(HI or LO)
		HI	2.PressⓂkey enter data and into HYS1 setting page
5-5	HYS1(Alarm 1 Hysteresis) Default=0	HYS1	1. Decide HYS1 with digit 1~3▲&▼&◀key (0~999)
		000	2. PressⓂkey enter data and into HYS2 setting page
5-6	HYS2(Alarm 2 Hysteresis) Default=0	HYS2	1. Decide HYS2 with digit 1~3▲&▼&◀key (0~999)
		000	2. PressⓂkey enter data and into HYS3 setting page
5-7	HYS3(Alarm 3 Hysteresis) Default=0	HYS3	1. Decide HYS3 with digit 1~3▲&▼&◀key (0~999)
		000	2. PressⓂkey enter data and into HYS4 setting page
5-8	HYS4(Alarm 4 Hysteresis) Default=0	HYS4	1. Decide HYS4 with digit 1~3▲&▼&◀key (0~999)
		000	2. PressⓂkey enter data and into DEL1 setting page
5-9	DEL1(Alarm 1 Delay time) Default=0	DEL1	1. Decide DEL1 with digit 1~3▲&▼&◀key (-99.9~99.9 sec)
		00	2. PressⓂkey enter data and into DEL2 setting page Note:-0.1 ~ -99.9 sec = Alarm active time, 0.1 ~ 99.9 sec = Alarm delay time
5-10	DEL2(Alarm 2 Delay time) Default=0	DEL2	1. Decide DEL2 with digit 1~3▲&▼&◀key (-99.9~99.9 sec)
		00	2. PressⓂkey enter data and into DEL3 setting page Note:-0.1 ~ -99.9 sec = Alarm active time, 0.1 ~ 99.9 sec = Alarm delay time
5-11	DEL3(Alarm 3 Delay time) Default=0	DEL3	1. Decide DEL3 with digit 1~3▲&▼&◀key (-99.9~99.9 sec)
		00	2. PressⓂkey enter data and into DEL4 setting page Note:-0.1 ~ -99.9 sec = Alarm active time, 0.1 ~ 99.9 sec = Alarm delay time
5-12	DEL4(Alarm 4 Delay time) Default=0	DEL4	1. Decide DEL4 with digit 1~3▲&▼&◀key (-99.9~99.9 sec)
		00	2. PressⓂkey return ROP setting page Note:-0.1 ~ -99.9 sec = Alarm active time, 0.1 ~ 99.9 sec = Alarm delay time

6	AOP(Analog output setting group)	AOP	Press◀key decide AOP setting group , pressⓂkey into ANLO setting page
6-1	ANLO(A/O Zero According to Display setting page) Default = 0	ANLO	1.Decide ANLO with per digit ▲&▼&◀key (-19999~99999)
		00000	2.PressⓂkey enter data and into ANHI setting page
6-2	ANHI(A/ O Span According to Display setting page) Default = 99999	ANHI	1.Decide ANHI with per digit ▲&▼&◀key(-19999~99999)
		99999	2.PressⓂkey return AOP setting page

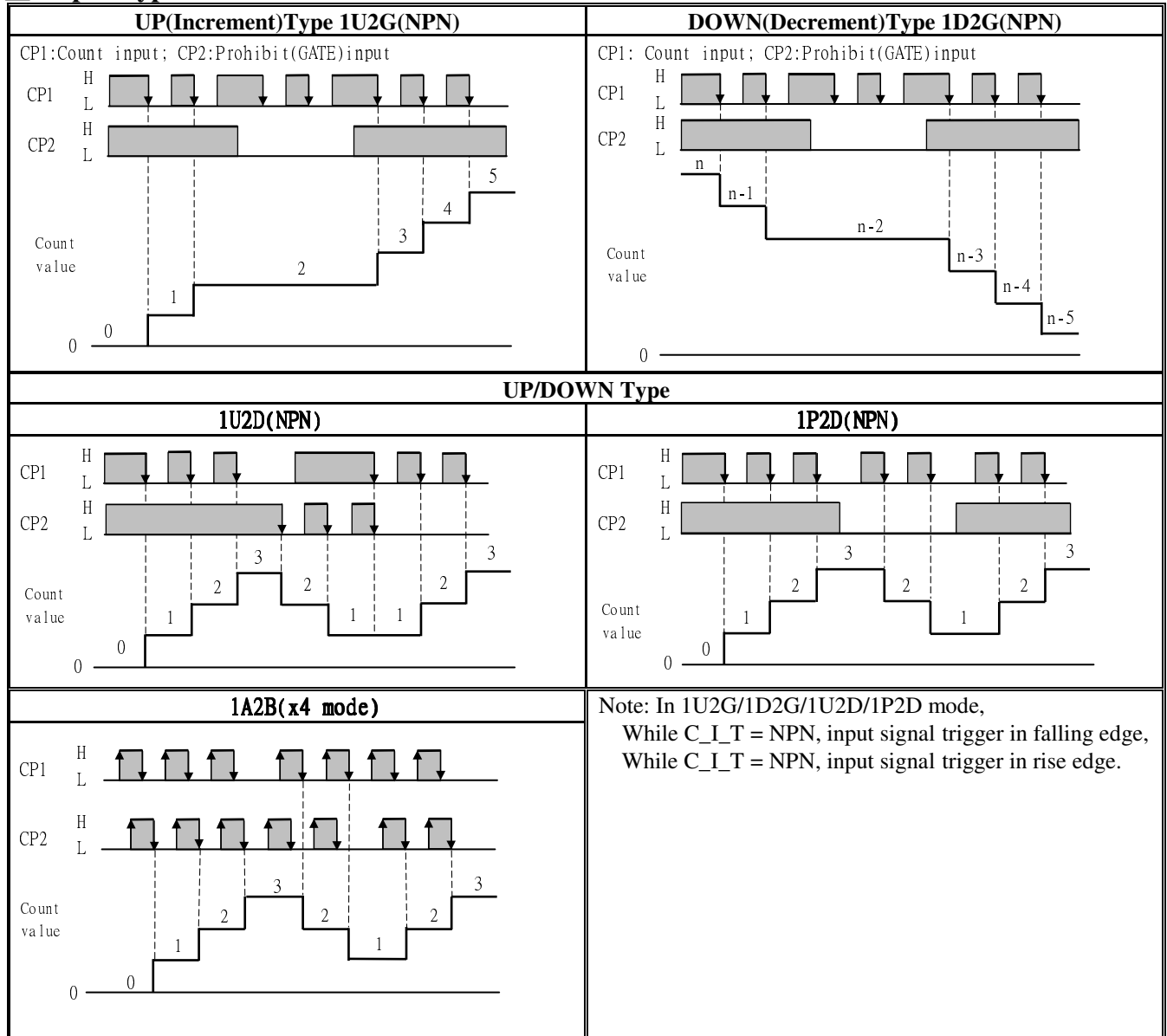
7	DOP(Communication setting group)	DOP	press◀key decide DOP setting group,pressⓂkey into ADDR setting page
7-1	ADDR(Communication –Address setting page) Default = 0	ADDR	1.Decide address with digit 1~3 ▲&▼&◀key(0~255)
		000	2.PressⓂkey enter data and into BAUD setting page
7-2	BAUD(Communication Baud Rate setting page) Default = 19200	BAUD	1.Decide baud rate with digital 1 ▲&▼ key(19200,9600,4800,2400)
		19200	2.PressⓂkey enter data and into PARI setting page
7-3	PARI(Communication Parity Check setting page) Default = n82	PARI	1.Decide parity check with digital 1 ▲&▼ key(n82,n81,even,odd)
		n.8.2	2.PressⓂkey enter data and return DOP setting group

■ Outside function key operate procedure

Step	Parameter mark description	Parameter mark	Operation manual
8	Normal display	12345	1.Press ALARM key about 3 sec, into AL1 setting page
8-1	AL1 (Alarm 1) Default=0	AL1	1.Decide AL1 with per digit ▲&▼&◀key (-19999~99999)
		00000	2. PressⓂkey enter data and into AL2 setting page
8-2	AL2 (Alarm 2) Default=0	AL2	1. Decide AL2 with per digit ▲&▼&◀key (-19999~99999)
		00000	2. P PressⓂkey enter data and into AL3 setting page
8-3	AL3 (Alarm 3) Default=0	AL3	1.Decide AL3 with per digit ▲&▼&◀key (-19999~99999)
		00000	2. PressⓂkey enter data and into AL4 setting page
8-4	AL4 (Alarm 4) Default=0	AL4	1. Decide AL4 with per digit ▲&▼&◀key (-19999~99999)
		00000	2. P PressⓂkey enter data and return normal didplay
9	Normal display	12345	Press D-ADJ key about 3 sec, into SCALE adjustment page
9-1	SCALE (Scale) Default = 1.0000	SCALE	1.Decide scale with per digit ▲&▼&◀key(0.0001~9.9999)
		1.0000	2.PressⓂkey enter data and return normal display

10	Normal display	1 2 3 4 5	1.Press A-ADJ key about 3 sec, into AZERO setting page
10-1	AZERO(Analog Output Zero Adjustment page) Default=0	8 7 6 5 0	1.Adjustment analog output zero with digit 1~4 ▲&▼&◀ key(±6000) 2. Press Ⓜ key enter data and into ASPAN adjustment page
		0 0 0 0 0	
10-2	ASPAN(Analog Output Span Adjustment page) Default=0	8 5 0 0 0	1. Adjustment analog output span with digit 1~4 ▲&▼&◀ key (±6000) 2. Press Ⓜ key enter data and return normal display
		0 0 0 0 0	

Input Type and Count Value



Appendix	Error Mark description	Error Mark	Analyze & Description
1	Display over range error detect	∞ 0 F L	Display over range(99999)
2	Display under range error detect	- ∞ 0 F L	Display under range (-19999)
3	EEPROM error detect	E - 0 0	1.External interference when EEPROM read/write 2.EEPROM write over 100000 times (guarantee 10 years) Please power reset,if still display E-00,doing following step: 1.E-00 & No alternate display for inquire reset EEPROM 2.Decide Yes with ▲&▼ key,press Ⓜ key return normal display 3.EEPROM was reset,Please follow step 1~10 setting again
		∞ 0	
		4 E 5	

MMC726 Modbus RTU Mode Protocol Address Map

Data format 16Bit/32Bit, sign bit 8000~7FFF(-32768~32767),80000000~7FFFFFFF(-2147483648~2147483647)

Address	Name	Description	Accept
0000	DISPM	SV display indicate,Input Range 0000~0003(0~3) (0:AL1, 1:AL2, 2:AL3, 3:AL4)	R/W
0001	DP	Decimal Point,Input Range 0000~0004 (0~4)(0:10 ⁰ ,1:10 ⁻¹ ,2:10 ⁻² ,3:10 ⁻³ ,4:10 ⁻⁴)	R/W
0002	C-I-T	Count Input Type,Input Range 0000~0001 (0~1) (0:NPN,1:PNP)	R/W
0003	I_MODE	Input mode,Input Range 0000~0004 (0~4) (0:1U2G, 1:1D2G, 2:1U2D, 3:1P2D, 4:1A2B)	R/W
0004	C-R-S	Count Rates Select,Input Range 0000~0001 (0~1) (0:50Hz,1:50KHz)	R/W
0005	RST-T	Reset time ,Input Range 0000~0001 (0~1) (0:1mS,1:20mS)	R/W
0006	LOCK	Panel Lock,Input Range 0000~0001 (0~1)(NO/YES)	R/W
0007	ACT1	Alarm Active 1,Input Range 0000~0001(0~1) (0:HI,1:LO)	R/W
0008	ACT2	Alarm Active 2,Input Range 0000~0001(0~1) (0:HI,1:LO)	R/W
0009	ACT3	Alarm Active 3,Input Range 0000~0001(0~1) (0:HI,1:LO)	R/W
000A	ACT4	Alarm Active 4,Input Range 0000~0001(0~1) (0:HI,1:LO)	R/W
000B	HYS1	Alarm hysteresis 1,Input Range 0000~03E7 (0~999)	R/W
000C	HYS2	Alarm hysteresis 2,Input Range 0000~03E7 (0~999)	R/W
000D	HYS3	Alarm hysteresis 3,Input Range 0000~03E7 (0~999)	R/W
000E	HYS4	Alarm hysteresis 4,Input Range 0000~03E7 (0~999)	R/W
000F	DEL1	Alarm Delay 1,Input Range FC19~03E7 (-99.9~99.9)	R/W
0010	DEL2	Alarm Delay 2,Input Range FC19~03E7 (-99.9~99.9)	R/W
0011	DEL3	Alarm Delay 3,Input Range FC19~03E7 (-99.9~99.9)	R/W
0012	DEL4	Alarm Delay 4,Input Range FC19~03E7 (-99.9~99.9)	R/W
0013	ADDR	Communication Address,Input Range 0000~00FF (0~255)	R/W
0014	BAUD	Communication Baud Rate,Input Range 0000~0003 (0~3)(0:19200,1:9600,2:4800,3:2400)	R/W
0015	PARI	Communication Parity Check,Input Range 0000~0003 (0~3)(0:N82,1:N81,2:EVEN,3:ODD)	R/W
0016	A_ZERO	Analog Output Zero Adjust,Input Range E890~1770 (-6000~6000)	R/W
0017	A_SPAN	Analog Output Span Adjust,Input Range E890~1770 (-6000~6000)	R/W
0018	CODE	Pass Code,Input Range 00000000~0001869F (0~99999)high word	R/W
0019		Pass Code,Input Range 00000000~0001869F (0~99999)low word	R/W
001A	SCALE	Display Scale Input Range 00000001~0001869F (0.0001~9.9999)high word	R/W
001B		Display Scale Input Range 00000001~0001869F (0.0001~9.9999)low word	R/W
001C	ANLO	Analog Output Zero According to Display,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
001D		Analog Output Zero According to Display,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
001E	ANHI	Analog Output Span According to Display,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
001F		Analog Output Span According to Display,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
0020	AL1	Alarm 1,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
0021		Alarm 1,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
0022	AL2	Alarm 2,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
0023		Alarm 2,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
0024	AL3	Alarm 3,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
0025		Alarm 3,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
0026	AL4	Alarm 4,Input Range FFFF1E1~0001869F (-19999~99999)high word	R/W
0027		Alarm 4,Input Range FFFF1E1~0001869F (-19999~99999)low word	R/W
0028	DISP	Display Value, Display Range FFFF1E1~0001869F (-19999~99999)high word	R
0029		Display Value, Display Range FFFF1E1~0001869F (-19999~99999)low word	R
002A	STATUS	Status,Display Range 0000~003F(0~63) (0:OFF,1:ON)(Bit0:OUT1,Bit1:OUT2,Bit2:OUT3,Bit3:OUT4, Bit4:DOFL,Bit5:-DOFL)	R
002B	RST	Write = 0001(Function 06), Count value reset	W