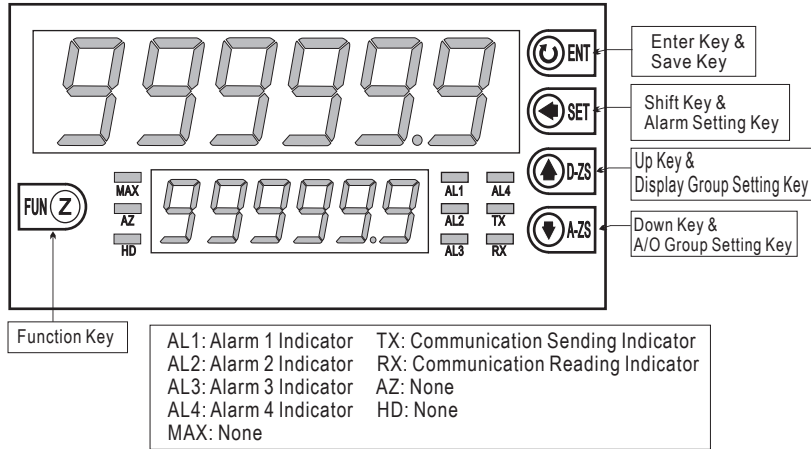


\* Please understand key indicators & functions at the first operation.

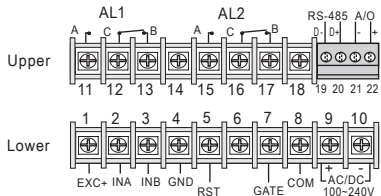
KEY FUNCTIONS



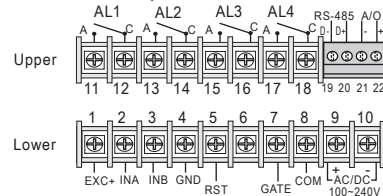
Symbol	Key Name	Descriptions
	Function Key	1. In the measuring status, press this key can enable the setting function. (Reset or Origin)
ENT	Enter Key & Save Key	1. In the measuring status, press this key can enter to parameter groups. 2. In the parameter setting, press this key can save the value & go to the next parameter.
	Shift Key & Alarm Setting Key	1. In the measuring status, press this key for 3 sec can enter to Alarm Setpoint Modification. 2. In the parameter page, press this key can enter to parameter setting. 3. In the parameter setting, press this key can move the cursor left.
	Up Key & Display Group Setting Key	1. In the measuring status, press this key for 3 sec can enter to Display Group Setting. 2. In the parameter page, press this key can back to the last parameter page. 3. In the parameter setting, press this key can increase the digit.
	Down Key & A/O Group Setting Key	1. In the measuring status, press this key for 3 sec can enter to A/O Group Setting. 2. In the parameter page, press this key can go to the next parameter page. 3. In the parameter setting, press this key can decrease the digit.
	Compound Key	1. In any status, press this key can back to measuring status. 2. While the buzzer acts, press this key can mute the buzzer.

WIRING CONNECTION

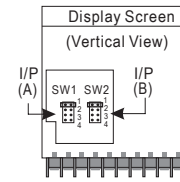
● 2 Alarms Output:



● 4 Alarms Output:



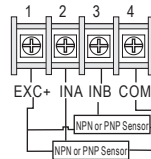
INPUT SIGNAL MODIFICATION



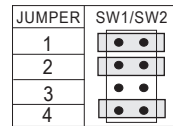
\*\*To Select the pin to modify the input signal for different sensors.  
PS: In dual input type, excitation power must be the same.

SW1/SW2	JUMPER	DEFINITION
	1	Open: 12V; Close: 5V
	2	Open: 10 KHz; Close: 400Hz
	3	Open: NPN; Close: PNP
	4	Open: PNP; Close: NPN

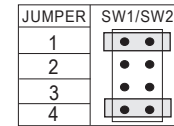
\*\*Connection:



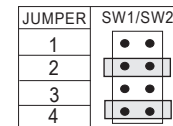
NPN (5V): 0~400 Hz



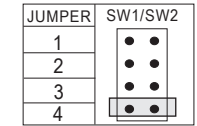
NPN (5V): 0~10 KHz



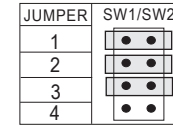
NPN (12V): 0~400 Hz



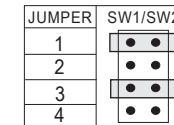
NPN (12V): 0~10 KHz



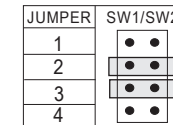
PNP (5V): 0~400 Hz



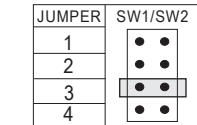
PNP (5V): 0~10 KHz



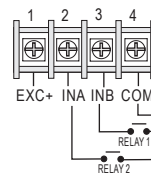
PNP (12V): 0~400 Hz



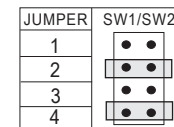
PNP (12V): 0~10 KHz



\*\*Connection:

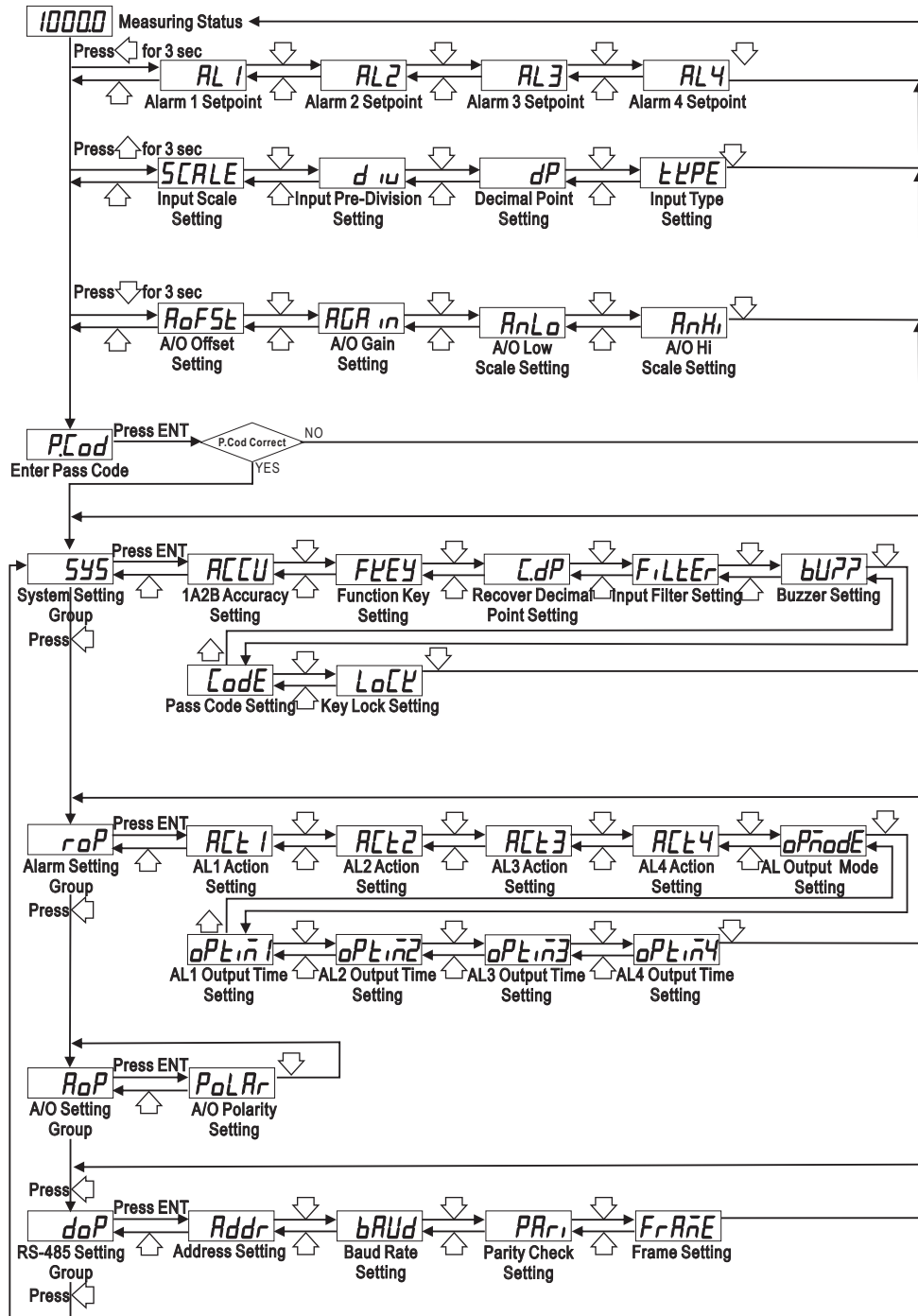


Relay Contact: NPN 0~400 Hz



\*\*For relay input type, please select NPN 0~ 400 Hz.

# OPERATING PROCEDURE



# ALARM SETPOINT MODIFICATION

\* In the measuring status, press  $\leftarrow$  for 3 sec can enter to Alarm Setpoint Modification.

Display	Default	Name	Descriptions
AL1	00000	Alarm 1 Setpoint (AL1)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify Alarm Setpoint. Range: -199999~999999 3. Press ENT to save the value and go to the next parameter.
AL2	00000	Alarm 2 Setpoint (AL2)	
AL3	00000	Alarm 3 Setpoint (AL3)	
AL4	00000	Alarm 4 Setpoint (AL4)	

# DISPLAY SETTING

\* In the measuring status, press  $\leftarrow$  for 3 sec can enter to Display Group Setting.

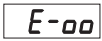
Display	Default	Name	Descriptions
SCALE	10000	Input Scale Setting (SCALE)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify Input Scale. Range: 0.00001~9.99999 3. Press ENT to save the value and go to the next parameter.
div	0000 1	Input Pre-Division Setting (div)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify Input Pre-Division. Range: 1~999999 3. Press ENT to save the value and go to the next parameter.
dP	00000	Decimal Point Setting (dp)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can select Decimal Point. Range: 0, 1, 2, 3, 4, 5 (DP) 3. Press ENT to save the value and go to the next parameter.
TYPE	1U2d	Input Type Setting (TYPE)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can select Input Type. Range: 1U2d, 1P2d, 1A2b 3. Press ENT to save the value and back to Display Setting..

# A/O SETTING

\* In the measuring status, press  $\downarrow$  for 3 sec can enter to A/O Group Setting.





















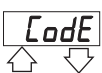







Display	Default	Name	Descriptions
AoFSt	00000	A/O Offset Setting (AoFSt)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify A/O Offset. Range: -9999~9999 3. Press ENT to save the value and go to the next parameter.
AGA in	00000	A/O Gain Setting (AGAI)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify A/O Gain. Range: -9999~9999 3. Press ENT to save the value and go to the next parameter.
AnLo	00000	A/O Low Scale Setting (AnLo)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify A/O Low Scale. Range: -199999~999999 If this value is 0, while display is 0, output signal will be 4 mAdc. 3. Press ENT to save the value and go to the next parameter.
AnHi	99999	A/O Hi Scale Setting (AnHi)	1. Press $\leftarrow$ to enter the parameter setting, the digit will be flashed. 2. Press $\uparrow$ or $\downarrow$ can modify A/O Hi Scale. Range: -199999~999999 If this value is 100, while display is 100, output signal will be 20 mAdc. 3. Press ENT to save the value and back to A/O Setting.

## ERROR CODE OF SELF-DIAGNOSIS

Display	Descriptions
	EEPROM reading / writing suffers the interference ( about 1 million times).
** Please check the wiring connection is correct first, if the problem still exist, please return the meter to the factory.	









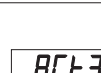


















## SYSTEM (SYS) SETTING GROUP PROCEDURE

\* While Pass Code is correct, Press  can select System Setting Group.

Display	Default	Name	Descriptions
	41	1A2B Accuracy Setting (ACCU)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select 1A2B Accuracy. Range: X1, X4 P.S.: This function is available when type is set by "1A2B". 3. Press <b>ENT</b> to save the value and go to the next parameter.
	rESET	Function Key Setting (FKEY)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Function Key. Range: rESET (Reset), oriGin (Origin) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	YES	Recover Decimal Point Setting (C.dP)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Recover Decimal Point Function. Range: YES (Recover), no (Do Not Recover) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	oFF	Input Filter Setting (FILtEr)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Input Filter. Range: 4000, 400, 40, 4, oFF (Hz) If this value is 400, the input signal will be filtered above 400 Hz. 3. Press <b>ENT</b> to save the value and go to the next parameter.
	no	Buzzer Setting (bUZZ)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can close Buzzer. Range: no (Do Not Close), YES (Close) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	00000	Pass Code Setting (P.Cod)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can modify Pass Code. Range: 0~19999 (Please do remember new Pass Code) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	no	Key Lock Setting (LoCK)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can close Key Lock. Range: no (Do Not Close), YES (Close) 3. Press <b>ENT</b> to save the value and back to System Setting Group.

## ALARM (roP) SETTING GROUP PROCEDURE

\* While Pass Code is correct, Press  can select Alarm Output Setting Group.

Display	Default	Name	Descriptions
	H I	AL1 Action Setting (ACT1)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Alarm 1 Action. Range: Hi ( $\geq$ Alarm Setpoint On), Lo ( $<$ Alarm Setpoint On) 3. Press <b>ENT</b> to save the value and back to A/O Group Setting.
	H I	AL2 Action Setting (ACT2)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Alarm 2 Action. Range: WArn (Alarm Warn), Hi ( $\geq$ Alarm Setpoint On), Lo ( $<$ Alarm Setpoint On) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	H I	AL3 Action Setting (ACT3)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Alarm 3 Action. Range: WArn (Alarm Warn), Hi ( $\geq$ Alarm Setpoint On), Lo ( $<$ Alarm Setpoint On), Go ( $<$ Hi Setpoint & $>$ Lo Setpoint On) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	H I	AL4 Action Setting (ACT4)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Alarm 4 Action. Range: WArn (Alarm Warn), Hi ( $\geq$ Alarm Setpoint On), Lo ( $<$ Alarm Setpoint On) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	n	AL Output Mode Setting (oPModE)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Alarm Output Mode. Range: n (Manual) / r (Return) / C (Continue) / SA (Semi-Automatic) / CP (Compare) / or (Origin) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	0000 I	AL1 Output Time Setting (optiM1)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can modify Alarm Output Time. Range: 1~99 (sec) If Alarm is acted, alarm will be turned off after this setting (sec). 3. Press <b>ENT</b> to save the value and back to Alarm Setting Group.
	0000 I	AL2 Output Time Setting (optiM2)	
	0000 I	AL3 Output Time Setting (optiM3)	
	0000 I	AL4 Output Time Setting (optiM4)	



## A/O (AoP) SETTING GROUP PROCEDURE

\* While Pass Code is correct, Press can select A/O Setting Group.

Display	Default	Name	Descriptions
	no	A/O Polarity Setting (PoLAr)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select A/O Polarity. Range: no (Positive Pole O/P; 0~10 Vdc), YES (Positive & Negative Pole O/P; -10~+10 Vdc) 3. Press <b>ENT</b> to save the value and back to A/O Setting Group.

## RS-485 (doP) SETTING GROUP PROCEDURE

\* While Pass Code is correct, Press can select RS-485 Setting Group.

Display	Default	Name	Descriptions
	00000	Address Setting (Addr)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can modify Address. Range: 0~255 3. Press <b>ENT</b> to save the value and go to the next parameter.
	38400	Baud Rate Setting (bAUd)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Baud Rate. Range: 38400, 19200, 9600, 4800 (bps) 3. Press <b>ENT</b> to save the value and go to the next parameter.
	nB2	Parity Check Setting (PARr)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Parity Check. Range: n.8.2., n.8.1., EvEn, odd 3. Press <b>ENT</b> to save the value and go to the next parameter.
	no	Frame Setting (FrArnE)	1. Press  to enter the parameter setting, the digit will be flashed. 2. Press  or  can select Frame. Range: no (Hi to Lo), YES (Lo to Hi) 3. Press <b>ENT</b> to save the value and back to RS-485 Setting Group.

## INDEX CODE SUPPLEMENT

\* The following codes are for hexadecimal.

Page / Name	Page / Name	Page / Name	Page / Name	Page / Name
00: SYS	01: roP	02: AoP	03: doP	04: P.Cod
05: E-00	06: LoCK	07: FILtEr	08: bUZZ	09: ACCU
0A: FKEY	0B: PoLAr	0C: ACT1	0D: ACT2	0E: ACT3
0F: ACT4	10: oPModE	11: PARr	12: bAUd	13: FrArnE
14: tYPE	15: CdP	16: dP	17: Addr	18: oPtIM1
19: oPtIM2	1A: oPtIM3	1B: oPtIM4	1C: CodE	1D: AoFSt
1E: AGAin	1F: div	20: SCALE	21: AnLo	22: AnHi
23: AL1	24: AL2	25: AL3	26: AL4	27: Current Display

## MODBUS RTU MODE PROTOCOL ADDRESS TABLE

\* Data form: 16 / 32 bit, +/-8000~7FFF(-32768~32767), 800000007FFFFFFF(-2147483648~2147483647)

Modbus	Hex	Name	Act	Descriptions
40001	0000	ID	R	Model number identification; GC6 is 29
40002	0001	STATUS	R	Current alarm output & external control input status, range: 0000~00F0 (0~240) (Bit 7: AL4, Bit 6: AL3, Bit 5: AL2, Bit AL1, Bit 3: Buzz) 0:Off, 1:On
40003	0002	INDEX	R/W	Index, range: 0000~0027 (0~39) [Please refer section 4.2 for detail.]
40004	0003	LOCK	R/W	Key lock setting, range: 0000~0001 (0~1); 0:No, 1:YES
40005	0004	FILTER	R/W	Input filter setting, range: 0000~0004 (0~4); 0:4000, 1:400, 2:40, 3:4, 4:0FF
40006	0005	BUZZ	R/W	Buzzer setting, range: 0000~0001 (0~1); 0:No, 1:YES
40007	0006	ACCU	R/W	1A2B accuracy setting, range: 0000~0001 (0~1); 0:X1, 1:X4
40008	0007	FKEY	R/W	Function key setting, range: 0000~0001 (0~1); 0:rESEt, 1:oriGin
40009	0008	POLAR	R/W	Polar setting, range: 0000~0001 (0~1); 0:No, 1:YES
40010	0009	ACT1	R/W	Alarm 1 action setting, range: 0001~0002 (1~2); 1:Hi, 2:Lo
40011	000A	ACT2	R/W	Alarm 2 action setting, range: 0000~0002 (0~2); 0:WArM, 1:Hi, 2:Lo
40012	000B	ACT3	R/W	Alarm 3 action setting, range: 0000~0001 (0~3); 0:WArM, 1:Hi, 2:Lo, 3:Go
40013	000C	ACT4	R/W	Alarm 4 action setting, range: 0000~0001 (0~2); 0:WArM, 1:Hi, 2:Lo
40014	000D	OPMODE	R/W	Alarm output mode setting, range: 0000~0005 (0~5); 0:n, 1:r, 2:C, 3:SA, 4:CP, 5:o
40015	000E	PARI	R/W	Parity check setting, range: 0000~0003 (0~3); 0:n.8.2., 1:n.8.1., 2:EvEn, 3:odd
40016	000F	BAUD	R/W	Baud Rate setting, range: 0000~0003 (0~3); 0:38400, 1:19200, 2:9600, 3:4800
40017	0010	FRAME	R/W	Frame setting, range: 0000~0001 (0~1); 0:No, 1:YES
40018	0011	TYPE	R/W	Input type setting, range: 0000~0002 (0~2); 0:1U2d, 1:1P2d, 2:1A2b
40019	0012	CDP	R/W	Recover decimal point setting, range: 0000~0001 (0~1); 0:YES, 1:no
40020	0013	DP	R/W	Decimal point setting, range: 0000~0005 (0~5); 0:10 <sup>0</sup> , 1:10 <sup>1</sup> , 2:10 <sup>2</sup> , 3:10 <sup>3</sup> , 4:10 <sup>4</sup> , 5:10 <sup>5</sup>
40021	0014	ADDR	R/W	Address setting, range: 0000~00FF (0~255)
40022	0015	OPTIM1	R/W	Alarm 1 output time setting, range: 0001~0063 (1~99)
40023	0016	OPTIM2	R/W	Alarm 2 output time setting, range: 0001~0063 (1~99)
40024	0017	OPTIM3	R/W	Alarm 3 output time setting, range: 0001~0063 (1~99)
40025	0018	OPTIM4	R/W	Alarm 4 output time setting, range: 0001~0063 (1~99)
40026	0019	CODE	R/W	Pass code setting, range: 0000~4E1F (0~19999)
40027	001A	AOFST	R/W	A/O offset setting, range: D8F1~270F (-9999~9999)
40028	001B	AGAIN	R/W	A/O gain setting, range: D8F1~270F (-9999~9999)
40029	001C	DIV	R/W	Input Pre-Divisioning, range: 00000001~000F423F (1~999999) Hi Bit
40030	001D		R/W	Input Pre-Divisioning, range: 00000001~000F423F (1~999999) Lo Bit
40031	001E	SCALE	R/W	Input scale setting, range: 00000001~000F423F (1~999999) Hi Bit
40032	001F		R/W	Input scale setting, range: 00000001~000F423F (1~999999) Lo Bit
40033	0020	ANLO	R/W	A/O low scale setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40034	0021		R/W	A/O low scale setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40035	0022	ANHI	R/W	A/O hi scale setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40036	0023		R/W	A/O hi scale setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40037	0024	AL1	R/W	Alarm 1 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40038	0025		R/W	Alarm 1 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40039	0026	AL2	R/W	Alarm 2 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40040	0027		R/W	Alarm 2 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40041	0028	AL3	R/W	Alarm 3 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40042	0029		R/W	Alarm 3 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40043	002A	AL4	R/W	Alarm 4 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40044	002B		R/W	Alarm 4 setpoint setting, range: FFFCF2C1~000F423F (-199999~999999) Lo Bit
40045	002C	RATE	R/W	Current display value, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit
40046	002D		R/W	Current display value, range: FFFCF2C1~000F423F (-199999~999999) Hi Bit