

YFM-02
多用途數位流量錶
RS232/485 命令手冊

Multi-functional digital flow counter
RS232/485 commands manual
Version 1.00

創裕實業股份有限公司(台灣)
YANGTECH TECHNOLOGY CO., LTD.(Taiwan)

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1. CMD_COUNTER_ID (0x01)--機台 ID 值

Function:

Set/Get target counter ID code.

Range=01~250

For RS485 control multi counter in same data bus. Counter can be accessed by correct ID.

Dout. (Digital Output))-Counter ID

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 01 00 31 30	Read Counter ID (1 byte xx ID).
ACK	52 45 01 04 01 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 01 01 30 31 xx	Write Counter ID (1 byte xx ID).
ACK	52 45 01 04 01 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 01 00 31 30 XX 00 00 00	Read Counter ID (1 byte xx ID). XX: Current Old ID
ACK	52 45 02 08 01 01 31 31 XX 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 01 01 30 31 xx 00 00 00 xx	Write Counter ID (1 byte xx New ID). XX: Current Old ID
ACK	53 45 02 08 01 01 30 31 xx 00 00 00 xx	

2. CMD_SUM_VALUE (0x02)--總累計量值

Function:

Get target counter Summary value (LSB first, max 9 Byte). Decimal separator x 10

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Summary value (7 segments 10 digits)

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 02 00 31 30	Read Sum value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 02 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 02 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write Sum value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 02 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 02 00 31 30 XX 00 00 00	Read Sum value (9 bytes xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 02 0B 31 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 02 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write Sum value (9 bytes xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 02 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

3. CMD_INS_VALUE (0x03)--瞬間量值

Function:

Get target counter instant value (LSB first, max 9 Bytes).

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Instant value (7 segments 5 digits)

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 03 00 31 30	Read Instant value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 03 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 03 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write Instant value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 03 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 03 00 31 30 XX 00 00 00	Read Instant value(9 byte xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 03 0B 31 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 03 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write Instant value(9 byte xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 03 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

4. CMD_BAT_VALUE (0x04)--批次總累計量值

Function:

Get target counter BATCH mode Summary value (LSB first, max 9 Bytes).

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Batch summary value (7 segments 10 digits in batch mode)

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 04 00 31 30	Read batch summary value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 04 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 04 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write batch summary value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 04 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 04 00 31 30 XX 00 00 00	Read batch summary value (9 bytes xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 04 0B 31 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write (ID mode for one master connect N Program counter)		
Hex code		Function descriptions
Set	53 45 02 08 04 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write batch summary value (9 bytes xx xx LSB first) decimal separator x 10 XX: Current ID
ACK	52 45 02 08 04 0B 30 35 XX 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

5. CMD_BAT_SING (0x05)--批次單次累計量值

Function:

Get target counter BATCH mode Single summary value (LSB first, max 9 Bytes).

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Batch single value (7 segments 10 digits in batch mode)

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 05 00 31 30	Read batch single value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 05 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 05 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write batch single value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 05 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example table ID mode:

Read data		
Hex code		Function descriptions
Set	53 45 02 08 05 00 31 30 xx 00 00 00	Read batch single value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 05 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 05 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write batch single value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 05 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

6. CMD_BAT_CYCLE (0x06) --批次循環次數值

Function:

Get target counter BATCH mode cycle value (2 Bytes) LSB first.

For example 100 = 64 00

Batch cycle value (7 segments 5 digits in batch mode)

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 06 00 31 30	Read batch cycle value (2 bytes xx xx LSB first)
ACK	52 45 01 04 06 02 31 32 xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 06 02 30 32 xx xx	Write batch cycle value (2 bytes xx xx LSB first)
ACK	52 45 01 04 06 02 30 32 xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 06 00 31 30 xx 00 00 00	Read batch cycle value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 06 02 31 32 xx 00 00 00 xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 06 02 30 32 xx 00 00 00 xx xx	Write batch cycle value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 06 02 30 32 xx 00 00 00 xx xx	

7. CMD_PASS_WORD (0x07) --系統參數-通關密碼值

Function:

Get target counter pass code value (LSB first 2 Bytes).

Range=0000~9999

For example 100 = 64 00

SyS. (System)- **Pass Code**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 07 00 31 30	Read pass code value (2 bytes xx xx LSB first)
ACK	52 45 01 04 07 02 31 32 xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 07 02 30 32 xx xx	Write pass code value (2 bytes xx xx LSB first)
ACK	52 45 01 04 07 02 30 32 xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 07 00 31 30 xx 00 00 00	Read pass code value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 07 02 31 32 xx 00 00 00 xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 07 02 30 32 xx 00 00 00 xx xx	Write pass code value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 07 02 30 32 xx 00 00 00 xx xx	

8. CMD_K_FACTORY (0x08) --系統參數-K 值

Function:

Get target counter K factory value (LSB first, 5 Bytes).

Range=0.00001~99999.99999

For example 1.00000 = A0 86 01 00 00

SyS. (System) - **K-factor**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 08 00 31 30	Read K-factor value (5 bytes xx xx LSB first) decimal separator x 5
ACK	52 45 01 04 08 07 31 35 05 05 xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 08 07 30 35 05 05 xx xx xx xx xx	Write K-factor value (5 bytes xx xx LSB first) decimal separator x 5
ACK	52 45 01 04 08 07 30 35 05 05 xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 08 00 31 30 xx 00 00 00	Read K-factor value (5 bytes xx xx LSB first) decimal separator x 5 xx: Current ID
ACK	52 45 02 08 08 07 31 35 xx 00 00 00 05 05 xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 08 07 30 35 xx 00 00 00 05 05 xx xx xx xx xx	Write K-factor value (5 bytes xx xx LSB first) decimal separator x 5 xx: Current ID
ACK	52 45 02 08 08 07 30 35 xx 00 00 00 05 05 xx xx xx xx xx	

9. CMD_SCALE (0x09)--系統參數-累計量換算比

Function:

Get target counter scale value (LSB first, 5 Bytes).

Range=0.00001~99999.99999

For example 1.00000 = A0 86 01 00 00

SyS. (System) - Totalizer Scale

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 09 00 31 30	Read scale value (5 bytes xx xx LSB first) decimal separator x 5
ACK	52 45 01 04 09 07 31 35 05 05 xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 09 07 30 35 05 05 xx xx xx xx xx	Write scale value (5 bytes xx xx LSB first) decimal separator x 5
ACK	52 45 01 04 09 07 30 35 05 05 xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 09 00 31 30 xx 00 00 00	Read scale value (5 bytes xx xx LSB first) decimal separator x 5 xx: Current ID
ACK	52 45 02 08 09 07 31 35 xx 00 00 00 05 05 xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 09 07 30 35 xx 00 00 00 05 05 xx xx xx xx xx	Write scale value (5 bytes xx xx LSB first) decimal separator x 5 xx: Current ID
ACK	52 45 02 08 09 07 30 35 xx 00 00 00 05 05 xx xx xx xx xx	

10. CMD_BATCH_AL_VALUE (0x0A) --警報參數-批次模式目標值

Function:

Get target counter batch value (LSB first, max 9 Bytes). Works on alarm 1 connector.

Range=0.0000000000~9999999999. 9999999999

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

ALout. (Alarm Output)- Batch Value

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0A 00 31 30	Read batch value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 0A 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0A 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write batch value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 0A 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0A 00 31 30 xx 00 00 00	Read batch value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 0A 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0A 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write batch value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 0A 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

11. CMD_CALIBRATION (0x0B) --警報參數-校正模式目標值

Function:

Get target counter calibration value (LSB first 9 Bytes).

Range=0.0100000000~4700000.000000000

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

ALout. (Alarm Output)- **Calibrate Value**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0B 00 31 30	Read calibration value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 0B 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0B 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write calibration value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 0B 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0B 00 31 30 xx 00 00 00	Read calibration value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 0B 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0B 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write calibration value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 0B 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

12. CMD_COUNT_TIME (0x0C) --系統參數-瞬間量時間單位

Function:

Set/Get target counter Count time.

Range=0~3

SyS. (System) - **Count Time**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0C 00 31 30	Read Counter time value (xx 1 byte) xx = 0, Time Base Sec. xx = 1,Time Base min. xx = 2,Time Base Hour xx = 3,Time Base Day xx = 4,Time Base INVALID
ACK	52 45 01 04 0C 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0C 01 30 31 xx	Write Counter time value (xx 1 byte)
ACK	52 45 01 04 0C 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0C 00 31 30 xx 00 00 00	Read Counter time value (xx 1 byte) xx: Current ID
ACK	52 45 02 08 0C 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0C 01 30 31 xx 00 00 00 xx	Write Counter time value (xx 1 byte) xx: Current ID
ACK	52 45 02 08 0C 01 30 31 xx 00 00 00 xx	

13. CMD_DECIMAL_TOTAL (0x0D) --系統參數-累積量小數位數

Function:

Set/Get target counter sum value decimal pointer.

Range= 0~6

SyS. (System) - **Decimal Point of Totalizer**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0D 00 31 30	Read sum value decimal pointer (1 byte xx) decimal separator range 0~6
ACK	52 45 01 04 0D 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0D 01 30 31 xx	Write sum value decimal pointer (1 byte xx) decimal separator range 0~6
ACK	52 45 01 04 0D 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0D 00 31 30 xx 00 00 00	Read sum value decimal pointer (1 byte xx) decimal separator range 0~6 xx: Current ID
ACK	52 45 02 08 0D 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0D 01 30 31 xx 00 00 00 xx	Write sum value decimal pointer (1 byte xx) decimal separator range 0~6 xx: Current ID
ACK	52 45 02 08 0D 01 30 31 xx 00 00 00 xx	

14. CMD_DECIMAL_RATE (0x0E) --系統參數-瞬間量小數位數

Function:

Set/Get target counter instant value decimal pointer.

Range= 0~4

SyS. (System) - **Decimal Point of Rate**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0E 00 31 30	Read instant value decimal pointer (1 byte xx) decimal separator range 0~4
ACK	52 45 01 04 0E 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0E 01 30 31 xx	Write instant value decimal pointer (1 byte xx) decimal separator range 0~4
ACK	52 45 01 04 0E 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0E 00 31 30 xx 00 00 00	Read instant value decimal pointer (1 byte xx) decimal separator range 0~4 xx: Current ID
ACK	52 45 02 08 0E 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0E 01 30 31 xx 00 00 00 xx	Write instant value decimal pointer (1 byte xx) decimal separator range 0~4 xx: Current ID
ACK	52 45 02 08 0E 01 30 31 xx 00 00 00 xx	

15. CMD_AL1_TYPE (0x0F) --警報參數-警報 1 類別

Function:

Set/Get target counter Alarm 1 Type.

Range=0(total) or 1(rate).

ALout. (Alarm Output) - **Alarm 1 Type**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 0F 00 31 30	Read alarm 1 output type (1 byte xx) xx = 0(total) xx = 1(rate)
ACK	52 45 01 04 0F 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 0F 01 30 31 xx	Write alarm 1 output type (1 byte xx)
ACK	52 45 01 04 0F 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 0F 00 31 30 xx 00 00 00	Read alarm 1 output type (1 byte xx) xx: Current ID
ACK	52 45 02 08 0F 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 0F 01 30 31 xx 00 00 00 xx	Write alarm 1 output type (1 byte xx) xx: Current ID
ACK	52 45 02 08 0F 01 30 31 xx 00 00 00 xx	

16. CMD_AL2_TYPE (0x10) --警報參數-警報 2 類別

Function:

Set/Get target counter AL2 type.

Range=0(total) or 1(rate).

ALout. (Alarm Output) - **Alarm 2 Type**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 10 00 31 30	Read alarm 2 output type (1 byte xx) xx = 0(total) xx = 1(rate)
ACK	52 45 01 04 10 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 10 01 30 31 xx	Write alarm 2 output type (1 byte xx)
ACK	52 45 01 04 10 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 10 00 31 30 xx 00 00 00	Read alarm 2 output type (1 byte xx) xx: Current ID
ACK	52 45 02 08 10 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 10 01 30 31 xx 00 00 00 xx	Write alarm 2 output type (1 byte xx) xx: Current ID
ACK	52 45 02 08 10 01 30 31 xx 00 00 00 xx	

17. CMD_AL1_VALUE (0x11) --警報參數-警報 1 作用數值

Function:

Get target counter AL1 value (LSB first, max 9 Bytes).

Range=0.0000000000~9999999999. 9999999999

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

ALout. (Alarm Output) - **Alarm 1 Value**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 11 00 31 30	Read alarm 1 value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 11 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 11 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write alarm 1 value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 11 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 11 00 31 30 xx 00 00 00	Read alarm 1 value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 11 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 11 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write alarm 1 value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 11 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

18. CMD_AL2_VALUE (0x12) --警報參數-警報 2 作用數值

Function:

Get target counter alarm 2 value (LSB first, max 9 Bytes).

Range=0.0000000000~9999999999. 9999999999

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

ALout. (Alarm Output) - **Alarm 2 Value**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 12 00 31 30	Read alarm 2 value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 12 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 12 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write alarm 2 value (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 12 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 12 00 31 30 xx 00 00 00	Read alarm 2 value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 12 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 12 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write alarm 2 value (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 12 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

19. CMD_AL1_ACTION (0x13) --警報參數-警報 1 動作方向

Function:

Set/Get target counter alarm 1 Action type.

Range= 0(Low) or 1(Hi).

ALout. (Alarm Output) - **Alarm 1 Action**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 13 00 31 30	Read alarm1 Action (1 byte xx). XX = 0 (Low) XX = 1 (Hi)
ACK	52 45 01 04 13 01 31 31 XX	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 13 01 30 31 XX	Write alarm1 Action (1 byte xx)
ACK	52 45 01 04 13 01 30 31 XX	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 13 00 31 30 xx 00 00 00	Read alarm1 Action (1 byte xx). xx: Current ID
ACK	52 45 02 08 13 01 31 31 xx 00 00 00 XX	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 13 01 30 31 xx 00 00 00 XX	Write alarm1 Action (1 byte xx). xx: Current ID
ACK	52 45 02 08 13 01 30 31 xx 00 00 00 XX	

20. CMD_AL2_ACTION (0x14)- 警報參數-警報 2 動作方向

Function:

Set/Get target counter alarm 2 Action type.

Range= 0(Low) or 1(Hi).

ALout. (Alarm Output) - **Alarm 2 Action**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 14 00 31 30	Read alarm 2 Action (byte xx). XX = 0 (Low) XX = 1 (Hi)
ACK	52 45 01 04 14 01 31 31 XX	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 14 01 30 31 XX	Write alarm 2 Action (1 byte xx).
ACK	52 45 01 04 14 01 30 31 XX	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 14 00 31 30 xx 00 00 00	Read alarm 2 Action (1 byte xx). xx: Current ID
ACK	52 45 02 08 14 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 14 01 30 31 xx 00 00 00 xx	Write alarm 2 Action (1 byte xx). xx: Current ID
ACK	52 45 02 08 14 01 30 31 xx 00 00 00 xx	

21. CMD_ANALOG_OUT_TYPE (0x15)-- 類比參數-類比輸出類別

Function:

Set/Get target counter analog output type.

Range= 0(total) or 1(rate)

Aout. (Analog Output) - **Analog Output Type**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 15 00 31 30	Read analog output type (1 byte xx). XX = 0 (total) XX = 1(rate)
ACK	52 45 01 04 15 01 31 31 XX	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 15 01 30 31 XX	Write analog output type (1 byte xx).
ACK	52 45 01 04 15 01 30 31 XX	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 15 00 31 30 xx 00 00 00	Read analog output type. (1 byte xx). xx: Current ID
ACK	52 45 02 08 15 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 15 01 30 31 xx 00 00 00 xx	Write analog output type. (1 byte xx). xx: Current ID
ACK	52 45 02 08 15 01 30 31 xx 00 00 00 xx	

22. CMD_ANALOG_OUT_LOW (0x16)-- 類比參數-最小輸出對應顯示值

Function:

Get target counter's (analog out lowest point corresponds to display value) (LSB first, max 9 Bytes).

Min value should < Hi Value. (ALPtd 必須小於 AHPtd 否則無法輸入)

Range = 0.0000000000~9999999999. 9999999999

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Aout. (Analog Output) - **Analog Lowest Point corresponds to Display**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 16 00 31 30	Read Analog out low (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 16 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 16 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write Analog out low (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 16 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 16 00 31 30 xx 00 00 00	Read Analog out low (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 16 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 16 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write Analog out low (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 16 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

23. CMD_ANALOG_OUT_HI (0x17) --類比參數-最大輸出對應顯示值

Function:

Get target counter's (Analog Highest Point corresponds to Display) (LSB first, max 9 Bytes).

HI value should > Min Value. (AHPtd 必須大於 ALPtd 否則無法輸入)

Range = 0.0000000000~9999999999. 9999999999

For example 1.0000000000 = 00 E4 0B 54 02 00 00 00 00

Aout. (Analog Output) - **Analog Highest Point corresponds to Display**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 17 00 31 30	Read Analog out Hi (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 17 0B 31 35 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 17 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	Write Analog out Hi (9 bytes xx xx LSB first) decimal separator x 10
ACK	52 45 01 04 17 0B 30 35 09 0A xx xx xx xx xx xx xx xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 17 00 31 30 xx 00 00 00	Read Analog out Hi (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 17 0B 31 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 17 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	Write Analog out Hi (9 bytes xx xx LSB first) decimal separator x 10 xx: Current ID
ACK	52 45 02 08 17 0B 30 35 xx 00 00 00 09 0A xx xx xx xx xx xx xx xx xx	

24. CMD_ANALOG_LOW_ADJ (0x18) --類比參數-類比零點微調

Function:

Set/Get target counter analog zero point. (2 bytes LSB first)

Range= 0~511(adjust volt range=0~+7.0V)

For example 1 = 01 00

Aout. (Analog Output) - **Analog Zero point Adjust**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 18 00 31 30	Read analog zero point adjust value (2 bytes xx xx LSB first)
ACK	52 45 01 04 18 02 31 32 xx xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 18 02 30 32 xx xx	Write analog zero point adjust value (2 bytes xx xx LSB first)
ACK	52 45 01 04 18 02 30 32 xx xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 18 00 31 30 xx 00 00 00	Read analog zero point adjust value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 18 02 31 32 xx 00 00 00 xx xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 18 02 30 32 xx 00 00 00 xx xx	Write analog zero point adjust value (2 bytes xx xx LSB first) xx: Current ID
ACK	52 45 02 08 18 02 30 32 xx 00 00 00 xx xx	

25. CMD_ANALOG_HI_ADJ (0x19) --類比參數)-> 類比最大點微調

Function:

Set/Get target analog highest point adjust value.

Range=+60 ~ -127 (adjust volt from 10V to +8.5V ~ +11.0V)

1 Byte Value, Bit 6~bit0 is Dec or Add data, base on top reference value.

Bit 7 : 0 Add Top reference value.

Bit 7 : 1 Dec Top reference value.

Aout. (Analog Output) - **Analog Highest point Adjust**

A): Command example in normal mode (Only one counter in the data stream):

Read data		
Hex code		Function descriptions
Send	53 45 01 04 19 00 31 30	Read analog highest point adjust value (1 byte xx) Bit 7 : 0 Add Top reference value. Bit 7 : 1 Dec Top reference value. Bit 6~0: Add/Dec value
ACK	52 45 01 04 19 01 31 31 xx	
Write data		
Hex code		Function descriptions
Send	53 45 01 04 19 01 30 31 xx	Write analog highest point adjust value (1 byte xx)
ACK	52 45 01 04 19 01 30 31 xx	

B): Command example in ID mode (2~10 counters in the data stream):

Read data		
Hex code		Function descriptions
Set	53 45 02 08 19 00 31 30 xx 00 00 00	Read analog highest point adjust value 1 byte xx) xx: Current ID
ACK	52 45 02 08 19 01 31 31 xx 00 00 00 xx	
Write data		
Hex code		Function descriptions
Set	53 45 02 08 19 01 30 31 xx 00 00 00 xx	Write analog highest point adjust value (1 byte xx) xx: Current ID
ACK	52 45 02 08 19 01 30 31 xx 00 00 00 xx	

*規格如有變更恕不另行通知

The above specifications are subject to change without prior notice.

