

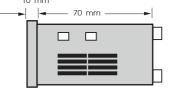


TECHNICAL SPECIFICATION (ลักษณะการทำงาน)

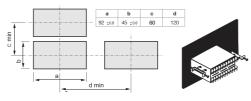
| Power Supply | | | | |
|--|--------------|--|--|--|
| Tower Consumption Towe | 12-24VAC/VDC | | | |
| Display (Show Channel Input) 7-Segment, 1Digit, Size 0.39 Inc 4/6 LED (Show Alarm output) 4/6 LED (Show Alarm output) 4/6 LED (Show Alarm output) 1 1 1 1 1 1 1 1 1 | | | | |
| Channel Input 7-Segment, 1Digit, Size 0.39 Inc 4/6 LED (Show Alarm output) | ch | | | |
| Channel Input | n | | | |
| Thermocouple | | | | |
| RTD | | | | |
| Voltage | | | | |
| Voltage | | | | |
| Range | mVDC, | | | |
| Label | | | | |
| Accuracy Temperature (25 °C) | | | | |
| Temperature (25 C) | | | | |
| Protocol MODBUS RTU | | | | |
| Baud Rate | | | | |
| Parity None | | | | |
| Stop Bits | bps | | | |
| Data Bits 8 Support Device Node 127 Output Relay Alarm 4/6 Alarm 3A/250VAC Ambient Temperature -10 °C to 60 °C Operation Humidity 85 % RH Non-Condensing | | | | |
| Support Device Node 127 Output Relay Alarm 4/6 Alarm 3A/250VAC Ambient Temperature -10 °C to 60 °C Operation Humidity 85 % RH Non-Condensing | | | | |
| Output Relay Alarm 4/6 Alarm 3A/250VAC Ambient Temperature -10 °C to 60 °C Operation Humidity 85 % RH Non-Condensing | | | | |
| Ambient Temperature -10 °C to 60 °C Operation Humidity 85 % RH Non-Condensing | | | | |
| Operation Humidity 85 % RH Non-Condensing | | | | |
| Trainiany 00 % KIT NOT CONDUCTING | | | | |
| Ambient Temperature -20 °C to 80 °C | | | | |
| | | | | |
| Storage Humidity 85 % RH Non-Condensing | | | | |
| Protection Front Protection Rating IP52 | | | | |
| Degree Case Protection Rating IP30 | | | | |
| Installation Panel Mounting | | | | |
| Material ABS-V0 | | | | |
| Size 48 x 96 x 80 mm. | | | | |
| Weight 240 g. | | | | |

■ DIMENSION (ขนาดและรูปร่าง)





■ CUTTING PANEL (การเจาะติดตั้ง)



■ DESCRIPTION (คุณสมบัติ)

- อุปกรณ์วัดและแสดงผลค่าสัญญาณอะนาล็อกมาตรฐานและค่าอุณหภูมิ และ Process ต่างๆ แบบ 4/6 Channel
- Universal Input สามารถรับอินพุตได้ทุกประเภท ในตัวเดียวกัน โดยการเลือกที่ Keypad
 - Thermocouple K, J, R, T, N, S, E
 - RTD (PT100)
 - Current Analog: 0-20 mA, 4-20 mA
 - Voltage Analog: 0-75 mV, 0-150 mV, 0-1 VDC, 0-5 VDC, 0-10 VDC, ±0-75 mV, ±0-150 mV, ±0-1 VDC, ±0-5 VDC,
- สามารถรับอินพุตได้ถึง 4 ถึง 6 อินพุตในตัวเดียวกัน และแต่ละอินพุต Isolate
- แสดงผลแบบ 7-Segment ขนาด 0.56 นิ้ว จำนวน 4 หลัก 1 แถว มองเห็นได้ขัดเจน และมี 7-Segment ขนาด 0.39 นิ้ว จำนวน 1 หลัก แสดงการทำงาน Channel ของอินพต
- มี 4/6 Alarm Output, 4/6 Alarm Function และยังสามารถเลือกให้ทำงาน สัมพันธ์กับอินพุต Channel 1, 2, 3, 4, 5, 6 หรือค่าความแตกต่างระหว่าง Channel 1 กับ 2 และ Channel 3 กับ 4 Channel 5 กับ 6 มาควบคุม การทำงานของ Alarm ได้
- สามารถเลือก Input Type แตกต่างกันในแต่ละ Channel ได้
- Peak Hold Function
- มี LED แสดงการทำงานของแต่ละ Alarm และ Peak Hold
- ติดต่อคอมพิวเตอร์ โดยผ่าน RS-485, MODBUS RTU Protocol
- มี Auto / Manual Display

OPERATION (การทำงาน)

TIM-94N-4/6CH เป็นอุปกรณ์วัดและแสดงผลแบบ Digital ที่สามารถ รับสัญญาณได้ 4/6 Input ในตัวเดี่ยวกันทำให้ประหยัดพื้นที่ มี Alarm 4/6 Output เพื่อต่อเข้าอุปกรณ์อื่น

การทำงานของ Alarm แต่ละตัวสามารถกำหนดได้ดังนี้

- Alarm แต่ละตัวสามารถกำหนดให้ทำงานสัมพันธ์กับ Channel ไหน ก็ได้ และเลือก Function ทำงานได้ 4 รูปแบบ พร้อม Delay Time ก่อนทำงาน ดังรูปที่ 1

- Alarm แต่ละตัวสามารถกำหนดให้ทำงานสัมพันธ์กับความแตกต่าง ระหว่าง Channel 1 กับ 2 หรือ Channel 3 กับ 4 ได้ ตัวอย่างเช่น Channel 1 และ 2 รับ Input จาก Pressure Transmitter 2 จุด TIM-94N-4/6CH จะเปรียบเทียบ ค่าแรงดัน 2 จุด ถ้าความแตกต่างเกินกว่าค่าที่ตั้งไว้ Alarm Output จะทำงาน สามารถทำงานแทน Differential Pressure ได้

สามารถเลือกให้โชว์ค่าแต่ละ Input ได้ทั้งแบบ Manual โดยกดปุ่มเลือก Channel ได้ตามต้องการ หรือแบบ Auto โดย TIM-94N-4/6CH จะโชว์ค่าในแต่ละ อินพุต หมุนไปตลอดเวลา Application เหมาะสำหรับเครื่องจักรพลาสติก, เครื่องจักรอาหาร, เครื่องมืออิเล็กทรอนิกส์และอื่นๆ

| Setting range/Display range | | | | | |
|-----------------------------|---------------------|-------------------|-------------------|--|--|
| Symbol | Input Type | Non-Decimal Point | Decimal Point | | |
| | T | -200 - 1372 °C | -199.9 - 999.9 °C | | |
| 00 | Thermocouple type K | -328 - 2501 °F | -199.9 - 999.9 °F | | |
| 01 | Thermocouple type J | -200 -1200°C | -199.9 - 999.9 °C | | |
| 01 | memocouple type 3 | -328 - 2192 °F | -199.9 - 999.9 °F | | |
| 02 | Thermocouple type R | 0 - 1768°C | - | | |
| | ' " | 32 - 3214°F | - | | |
| 03 | Thermocouple type T | -200 - 400°C | -199.9 - 400.0 °C | | |
| | | -328 - 752 °F | -199.9 - 752.0°F | | |
| 04 | Thermocouple type N | 0 - 1300°C | 0.0 - 999.9 °C | | |
| | | 32 - 2372 °F | 32.0 - 999.9 °F | | |
| 05 | Thermocouple type S | 0 - 1768°C | - | | |
| | | 32 - 3214°F | - | | |
| 06 | Thermocouple type E | -200 - 1000°C | -199.9 - 999.9 °C | | |
| | | -328 - 1832 °F | -199.9 - 999.9 °F | | |
| 07 | PT100 | -200 - 850 °C | -199.9 - 850.0 °C | | |
| | | -328 - 1562 °F | -199.9 - 999.9 °F | | |
| 10 | DC 0-20 mA | | | | |
| 11 | DC 4-20 mA | | | | |
| 20 | DC 0-75 mV | | | | |
| 21 | DC 0-150 mV | | | | |
| 22 | DC 0-1 VDC | | | | |
| 23 | DC 0-5 VDC | | -199.9 - 999.9 | | |
| 24 | DC 0-10 VDC | -1999 - 9999 | -19.99 - 99.99 | | |
| 25 | ±75 mV | | -1.999 - 9.999 | | |
| 26 | ±150 mV | | | | |
| 27 | ±1 VDC | | | | |
| 28 | ±5 VDC | ±5 VDC | | | |
| 29 | ±10 VDC | | | | |

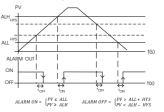
| Sambal | Innest Temp | Setting range/Display range | | | |
|--------|-------------|-----------------------------|---------|--|--|
| Symbol | Input Type | Minimum | Maximum | | |
| 10 | DC 0-20 mA | 0.00 | 20.00 | | |
| 11 | DC 4-20 mA | 4.00 | 20.00 | | |
| 20 | DC 0-75 mV | 0.0 | 75.0 | | |
| 21 | DC 0-150 mV | 0.0 | 150.0 | | |
| 22 | DC 0-1 VDC | 0.000 | 1.000 | | |
| 23 | DC 0-5 VDC | 0.00 | 5.00 | | |
| 24 | DC 0-10 VDC | 0.00 | 10.00 | | |
| 25 | ±75 mV | -75.0 | 75.0 | | |
| 26 | ±150 mV | -150.0 | 150.0 | | |
| 27 | ±1 VDC | -1.000 | 1.000 | | |
| 28 | ±5 VDC | -5.00 | 5.00 | | |
| 29 | ±10 VDC | -10.00 | 10.00 | | |

Table 2 Analog Input setting ran

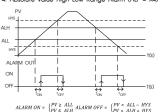
ALARM OUTPUT : Process value (PV) to be used as Alarm Output.

Stand-by Sequence : After Starting Operation of Step, Alarm Output Does not Turn On Unless The Process Value Reach the Value of OFF Position of Alarm Output.

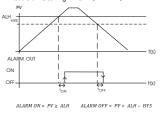
. Absolute value High Low Band Alarm (ALF = X1)

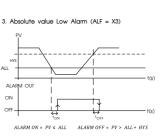




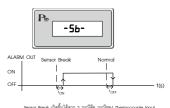


2. Absolute value High Alarm (ALF = X2)



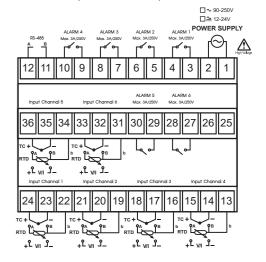


5. Sensor Break (ALF = X5)

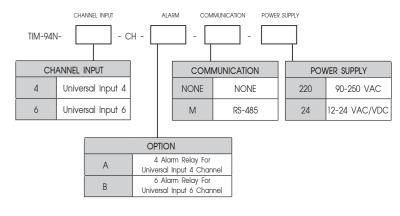


ม่ได้ต่อลายเข็นเซอร์ หรือ ลายเข็นเซอร์ขาด และกรณีของ Analog Input จะเกิด เมื่อค่า Input ที่เข้ามาเกิน จนอุปกรณ์ไม่สามารถอ่านค่าได้

WIRING DIAGRAM (วงจรการต่อใช้งาน)

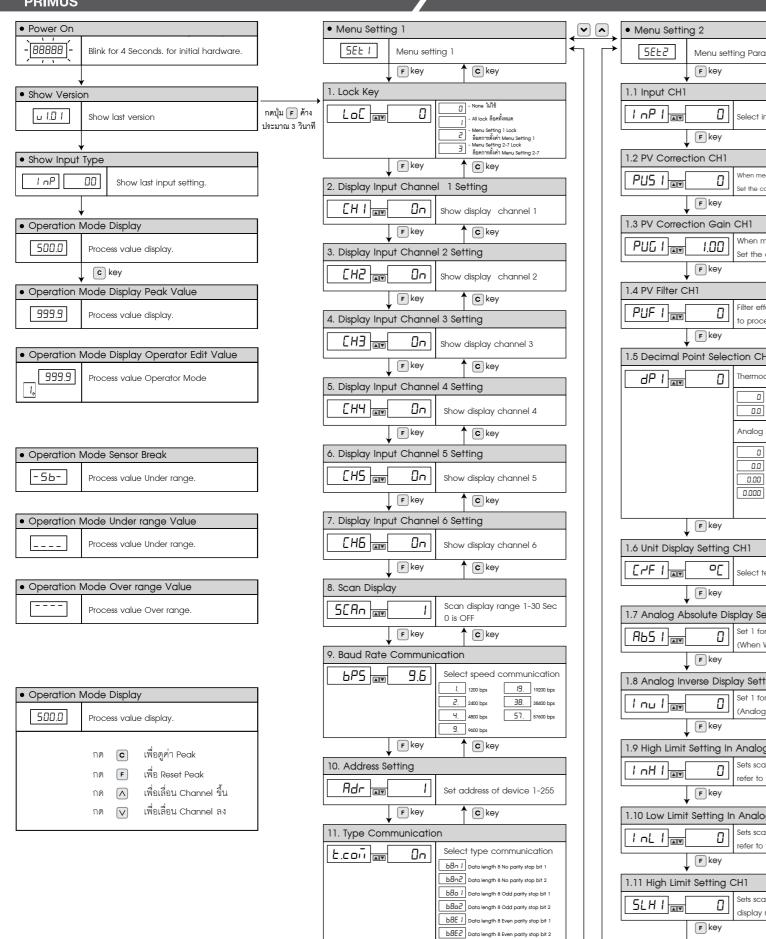


ORDERING CODE (การติดต่อสั่งซื้อ)



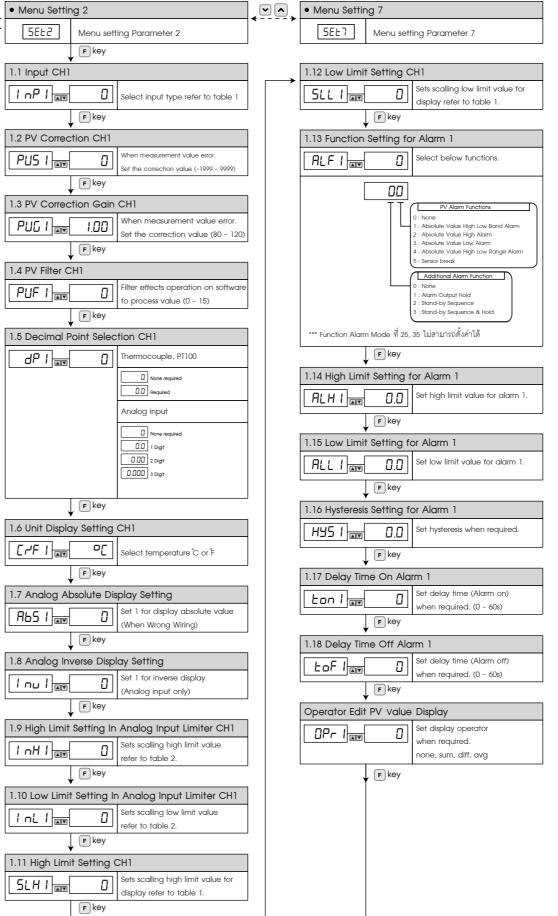
Più TIM-94N-4/6CH / 4/6 CHANNELS DIGITAL INDICATOR

Primus User Manual

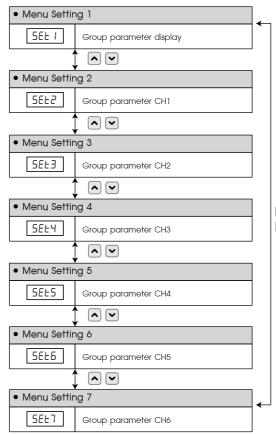


F key

ckey



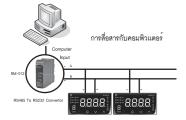
GROUP DISPLAY



Primus User Manual

SERIAL COMMUNICATIONS

The TIM-94N-4/6CH are equipped with a RS-485 serial communications interface to allow connection to computers or PLCs.MODBUS protocol is provide as stabdard communication. The user can connect TIM-94N-4/6CH as network up 127 $\,$ meters.



MODBUS PROTOCOL

- This MODBUS protocol has been implement in accordance with MODBUS.ORG MODBUS application.
- Protocol specification V1.1 with the following conditionsapplying.
- The following conditions apply.
- Baudrate can selected refer **Speed setting**
- The format is MODBUS RTU
- \bullet UART data can selected refer $\underline{\text{Communication setting}}$
- Data is considered to be half duplex using 2 wire

Modbus Exception codes

| Code | Name | Meaning |
|------|----------------------|--|
| 01 | ILLEGAL FUNCTION | The function code received in the query is not an allowable action for the server (or slave). |
| 02 | ILLEGAL DATA ADDRESS | The data address received in the query is not an allowable address for the server (or slave) |
| 03 | ILLEGAL DATA VALUE | A value contained in the query data field is not an allowable value for server (or slave). |

Example of a client request and server exception response

| Request | | Response | |
|---------------------------|-------|----------------|-------|
| Field Name | (Hex) | Field Name | (Hex) |
| Slave Address | 01 | Slave Address | 01 |
| Function | 04 | Function | 84 |
| Starting Address Hi | 00 | Exception Code | 02 |
| Starting Address Lo | 00 | CRC Hi | C2 |
| Quantity of Input Reg. Hi | 00 | CRC Lo | C1 |
| Quantity of Input Reg. Lo | 1E | | |
| CRC Hi | 70 | | |
| CRC Lo | 02 | | |

การคำนวนค่า Register

| การคำนวนค่าใน Mode Decemal Point dp 1(0.0) | การคำนวนค่าใน Mode Non Decemal Point dp 0(0) |
|--|--|
| Temperature = PV/10 | Temperature = PV |
| ค่าที่อ่านได้ PV = 300 | PV = 30 |
| Temperature = 30.0 °C | Temperature = 30 °C |

MODBUS TABLE (ตารางการสื่อสาร)

| Decimal | Hex | Contents | Format | Word | Access | Γ |
|---------|--------------|---------------------|--------|------|--------------------------|----------|
| 0 | 0X00 | PV1 | int | 1 | Read Only | ľ |
| 1 | 0X01 | PV2 | int | 1 | Read Only | r |
| 2 | 0X02 | PV3 | int | 1 | Read Only | t |
| 3 | 0X03 | PV4 | int | 1 | Read Only | t |
| 4 | 0X04 | PV5 | int | 1 | Read Only | ŀ |
| 5 | 0X05 | PV6 | int | 1 | Read Only | ŀ |
| 6 | 0X06 | LOC | int | 1 | Read/Write | ŀ |
| 7 | 0X07 | CH1 | int | 1 | Read/Write | ŀ |
| 8 | 0X08 | CH2 | int | 1 | Read/Write | F |
| 9 | 0X09 | CH3 | int | 1 | Read/Write | L |
| 10 | 0X0A | CH4 | int | 1 | | L |
| 11 | OXOA OXOB | CH5 | | | Read/Write Read/Write | L |
| | | CH6 | int | 1 | | L |
| 12 | 0X0C | | int | 1 | Read/Write | Γ |
| 13 | 0X0D | SCAN | int | 1 | Read/Write | r |
| 14 | OX0E | BAUDRATE | int | 1 | Read/Write | r |
| 15 | 0X0F | ADDRESS | int | 1 | Read/Write | t |
| 16 | 0X10 | TYPECOM | int | 1 | Read/Write | t |
| 17 | 0X11 | INPUT - 1 | int | 1 | Read/Write | ŀ |
| 18 | 0X12 | PVS - 1 | int | 1 | Read/Write | ŀ |
| 19 | 0X13 | PVG - 1 | int | 1 | Read/Write | ŀ |
| 20 | 0X14 | PVF - 1 | int | 1 | Read/Write | ŀ |
| 21 | 0X15 | DP - 1 | int | 1 | Read/Write | ŀ |
| 22 | 0X16 | C/F - 1 | int | 1 | Read/Write | L |
| 23 | 0X17 | ABS - 1 | int | 1 | Read/Write | L |
| 24 | 0X18 | INV - 1 | int | 1 | Read/Write | L |
| 25 | 0X19 | INH - 1 | int | 1 | Read/Write | |
| 26 | 0X1A | INL - 1 | int | 1 | Read/Write | Γ |
| 27 | OX1B | SLH - 1 | int | 1 | Read/Write | ľ |
| 28 | 0X1C | SLL - 1 | int | 1 | Read/Write | t |
| 29 | 0X1D | ALF - 1 | int | 1 | Read/Write | t |
| 30 | 0X1E | ALH - 1 | int | 1 | Read/Write | t |
| 31 | OX1F | ALL - 1 | int | 1 | Read/Write | ŀ |
| 32 | 0X20 | HYS - 1 | int | 1 | Read/Write | ŀ |
| 33 | 0X20 | TON - 1 | int | 1 | Read/Write | ŀ |
| 34 | 0X21 | | | | | ŀ |
| 35 | 0X23 | TOFF - 1 OPR - 1 | int | 1 | Read/Write Read/Write | F |
| | | | int | 1 | | Ļ |
| 36 | 0X24 | INPUT - 2 | int | 1 | Read/Write | L |
| 37 | 0X25 | PVS - 2 | int | 1 | Read/Write | L |
| 38 | 0X26 | PVG - 2 | int | 1 | Read/Write | L |
| 39 | 0X27 | PVF - 2 | int | 1 | Read/Write | ſ |
| 40 | 0X28 | DP - 2 | int | 1 | Read/Write | Γ |
| 41 | 0X29 | C/F - 2 | int | 1 | Read/Write | r |
| 42 | 0X2A | ABS - 2 | int | 1 | Read/Write | t |
| 43 | 0X2B | INV - 2 | int | 1 | Read/Write | t |
| 44 | 0X2C | INH - 2 | int | 1 | Read/Write | H |
| 45 | 0X2D | INL - 2 | int | 1 | Read/Write | + |
| 46 | 0X2E | SLH - 2 | int | 1 | Read/Write | + |
| 47 | 0X2F | SLL - 2 | int | 1 | Read/Write | F |
| 48 | 0X30 | ALF - 2 | int | 1 | Read/Write | F |
| 49 | 0X31 | ALH - 2 | int | 1 | Read/Write | L |
| 50 | 0X32 | ALL - 2 | int | 1 | Read/Write | L |
| 51 | 0X33 | HYS - 2 | int | 1 | Read/Write | L |
| 52 | 0X34 | TON - 2 | int | 1 | Read/Write | Ĺ |
| 53 | 0X35 | TOFF - 2 | int | 1 | Read/Write | ſ |
| 54 | 0X36 | OPR - 2 | int | 1 | Read/Write | Γ |
| 55 | 0X37 | INPUT - 3 | int | 1 | Read/Write | r |
| 56 | | | | 1 | Read/Write | t |
| | 0X38 | PVS-3 | int | | Read/Write | ۲ |
| 57 | 0X39 | PVG-3 | int | 1 | | + |
| 58 | 0X3A | PVF-3 | int | 1 | Read/Write | + |
| 59 | OX3B | DP-3 | int | 1 | Read/Write | \vdash |
| 60 | 0X3C | C/F - 3 | int | 1 | Read/Write | L |

| 61 | 0X3D | ABS - 3 | int | 1 | Read/Write |
|---|--|---|---|---|---|
| 62 | 0X3E | INV - 3 | int | 1 | Read/Write |
| 63 | 0X3F | INH - 3 | int | 1 | Read/Write |
| 64 | 0X40 | INL - 3 | int | 1 | Read/Write |
| 65 | 0X41 | SLH - 3 | int | 1 | Read/Write |
| 66 | 0X42 | SLL - 3 | int | 1 | Read/Write |
| 67 | 0X42 0X43 | ALF - 3 | int | 1 | Read/Write |
| 68 | 0X44 | ALH - 3 | int | 1 | Read/Write |
| 69 | 0X45 | ALL - 3 | int | 1 | Read/Write |
| 70 | 0X46 | HYS - 3 | int | 1 | Read/Write |
| | 0X47 | | | 1 | |
| 71 72 | 0X47 0X48 | TON - 3 TOFF - 3 | int | 1 | Read/Write |
| | | | int | | Read/Write |
| 73 | 0X49 | OPR - 3 | int | 1 | Read/Write |
| 74 | 0X4A | INPUT - 4 | int | 1 | Read/Write |
| 75 | 0X4B | PVS - 4 | int | 1 | Read/Write |
| 76 | 0X4C | PVG - 4 | int | 1 | Read/Write |
| 77 | 0X4D | PVF - 4 | int | 1 | Read/Write |
| 78 | 0X4E | DP - 4 | int | 1 | Read/Write |
| 79 | 0X4F | C/F - 4 | int | 1 | Read/Write |
| 80 | 0X50 | ABS - 4 | int | 1 | Read/Write |
| 81 | 0X51 | INV - 4 | int | 1 | Read/Write |
| 82 | 0X52 | INH - 4 | int | 1 | Read/Write |
| 83 | 0X53 | INL - 4 | int | 1 | Read/Write |
| 84 | 0X54 | SLH - 4 | int | 1 | Read/Write |
| 85 | 0X55 | SLL - 4 | int | 1 | Read/Write |
| 86 | 0X56 | ALF - 4 | int | 1 | Read/Write |
| 87 | 0X57 | ALH - 4 | int | 1 | Read/Write |
| 88 | 0X58 | ALL - 4 | int | 1 | Read/Write |
| 89 | 0X59 | HYS - 4 | int | 1 | Read/Write |
| 90 | 0X5A | TON - 4 | int | 1 | Read/Write |
| | | | | | |
| | | | | | |
| 91 | 0X5B | TOFF - 4 | int | 1 | Read/Write |
| 91 92 | 0X5B 0X5C | TOFF - 4 OPR - 4 | int int | 1 | Read/Write Read/Write |
| 91 92 93 | 0X5B 0X5C 0X5D | TOFF - 4 OPR - 4 INPUT - 5 | int int int | 1 1 | Read/Write Read/Write Read/Write |
| 91 92 93 94 | 0X5B 0X5C 0X5D 0X5E | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 | int int int int | 1 1 1 | Read/Write Read/Write Read/Write Read/Write |
| 91 92 93 94 95 | 0X5B 0X5C 0X5D 0X5E 0X5F | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 | int int int int | 1 1 1 1 | Read/Write Read/Write Read/Write Read/Write Read/Write |
| 91 92 93 94 95 96 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 | int int int int int | 1 1 1 1 1 | Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write |
| 91 92 93 94 95 96 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 | int int int int int int int int | 1 1 1 1 1 | Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write |
| 91 92 93 94 95 96 97 98 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 | int | 1 1 1 1 1 1 1 | Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write Read/Write |
| 91 92 93 94 95 96 97 98 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 | int | 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 | int | 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 | int | 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 | int | 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 | int | 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLH - 5 SLL - 5 ALF - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLH - 5 SLL - 5 ALF - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 HYS - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 ALL - 5 HYS - 5 TON - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 HYS - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6D | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 ALL - 5 HYS - 5 TON - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALL - 5 HYS - 5 TON - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLL - 5 ALF - 5 ALF - 5 ALL - 5 HYS - 5 TON - 5 TOFF - 5 OPR - 5 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C 0X6C | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLL - 5 ALF - 5 ALL - 5 HYS - 5 TOFF - 5 OPR - 5 INPUT -6 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C 0X6C 0X6C 0X6C 0X6C | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 HYS - 5 TON - 5 TOFF - 5 OPR - 5 INPUT - 6 PVS - 6 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6D 0X6E 0X70 0X71 0X72 0X73 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALF - 5 ALH - 5 ALL - 5 HYS - 5 TON - 5 TOFF - 5 OPR - 5 INPUT -6 PVS - 6 PVF - 6 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X66 0X67 0X68 0X6C 0X6D 0X6E 0X6F 0X70 0X71 0X72 0X73 0X74 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALH - 5 ALL - 5 HYS - 5 TOFF - 5 OPR - 5 INPUT - 6 PVS - 6 PVF - 6 DP-6 | int | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C 0X6C 0X6F 0X70 0X71 0X72 0X73 0X74 0X75 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALL - 5 ALL - 5 HYS - 5 TON - 5 INPUT - 6 PVS - 6 PVF - 6 DP-6 C/F - 6 | int | | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C 0X6C 0X6C 0X6C 0X70 0X71 0X72 0X73 0X74 0X75 0X76 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INL - 5 SLL - 5 ALF - 5 ALL - 5 HYS - 5 TON - 5 INPUT - 6 PVS - 6 PVF - 6 DP-6 C/F - 6 ABS - 6 | int | | Read/Write |
| 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 | 0X5B 0X5C 0X5D 0X5E 0X5F 0X60 0X61 0X62 0X63 0X64 0X65 0X66 0X67 0X68 0X69 0X6A 0X6B 0X6C 0X6C 0X6C 0X6F 0X70 0X71 0X72 0X73 0X74 0X75 | TOFF - 4 OPR - 4 INPUT - 5 PVS - 5 PVG - 5 PVF - 5 DP-5 C/F - 5 ABS - 5 INV - 5 INH - 5 SLH - 5 SLL - 5 ALL - 5 ALL - 5 HYS - 5 TON - 5 INPUT - 6 PVS - 6 PVF - 6 DP-6 C/F - 6 | int | | Read/Write |

| 121 | 0X79 | INL - 6 | int | 1 | Read/Write |
|-----|------|----------|-----|---|------------|
| 122 | 0X7A | SLH - 6 | int | 1 | Read/Write |
| 123 | 0X7B | SLL - 6 | int | 1 | Read/Write |
| 124 | 0X7C | ALF - 6 | int | 1 | Read/Write |
| 125 | 0X7D | ALH - 6 | int | 1 | Read/Write |
| 126 | OX7E | ALL - 6 | int | 1 | Read/Write |
| 127 | 0X7F | HYS - 6 | int | 1 | Read/Write |
| 128 | 0X80 | TON - 6 | int | 1 | Read/Write |
| 129 | 0X81 | TOFF - 6 | int | 1 | Read/Write |
| 130 | 0X82 | OPR - 6 | int | 1 | Read/Write |



丹 บริษัท ไพรมัส จำกัด