

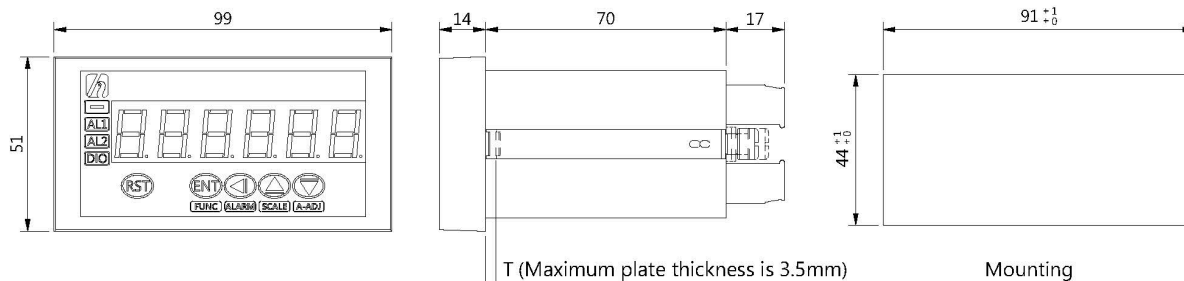
CA

CONTROLLER METER HIGH SPEED



- DIN W99 X H51 Counter
- Display Six Digits -999999 ~ 999999
- Adjustable Ratio of Signal/Angle 0.00001~9.99999
- Selectable Length or Angle count
- With RS485 and 16 bit Analog Output
- Alert Mode N/F/R/Q/C/P/K/HI/LO/Area
- Power Supply AC90~280V / DC 18~60V
- Strong Anti-Interference
- High Speed Counting Frequency

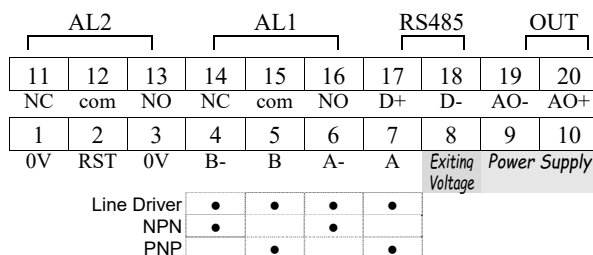
DIMENSION



SPECIFICATION

Detection System	Incremental 增量型
Input Wave 輸入波型	Square Wave 方波
Count Input Type 脈波輸入型式	Line Driver A/-A/B/-B phase, PNP, NPN
Sensor Power Supply	DC 12V $\pm$ 3%, 50 mA or DC 5V $\pm$ 5%, 50 mA
LEDs Display	Red High Efficiency LED High 0.56" (14.22 mm)
Alert Mode 警報模式	N / F / R / Q / C / P / K / HI / LO / Area
Max. Response 最大響應頻率	Max. 250K Hz
Insulation Resistance 絕緣阻抗(M Ω min.)	250 M Ω / 500 Vdc
Insulation Strength 耐壓強度(Vrms)	2KVac / 1 minute
Vibration 震動	10-55 Hz, X/Y/Y, / Vpp 0.75 mm, 2hr (max. 4.5G)
Weight 重量	$\leq$ 350 g
Operating Temp. / Humidity 操作溫度 / 濕度	0°C ~ 50°C, RH 35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	0°C ~ 70°C, RH 35% ~ 90% (No Condensation)
Digital Output RS485 Modbus RTU	Output Capacity 電晶體 30Vdc/50 mA
RS-485 Address 1 ~ 255	輸出容量 Relay 繼電器 250Vac/5A, 30Vdc/5A
RS-485 Baud Rate 57600, 38400, 19200, 9600, 4800	Alarm Output Response Time 電晶體 < 0.2 ms
Analog Output Resolution 16 bit DAC(Isolating)	Relay 繼電器 < 10 ms
Analog Output Response Time $\leq 1 / f + 2$ ms	Power Supply 外部電源 / AC 90~260V, max. 0.07A
Analog Output Drive Capability [Voltage] RL $\geq$ 2K; [Current] RL $\leq$ 800 Ω	Current Consumption 消耗電流 DC 18~60 V, max. 0.4A

Connection



ORDERING INFORMATION

CA	Model 機種	Output Signal 輸出型式	Alarm Mode 驅動方式	Exiting Voltage 感應器電源	Electronics 感應器電路	Power Supply 外部電源
	A: Position 位置 B: Angle 角度 C: Flow 流量	A $\bar{N}$: Display A1: Display (with Alarm) B1: RS485 (with Alarm) C1: Analog 4~20mA (with Alarm) C2: Analog 0~10V (with Alarm) C3: Analog 0~5V (with Alarm) D1: RS485+Analog 4~20mA (with Alarm) D2: RS485+Analog 0~10V (with Alarm) D3: RS485+ Analog 0~5V (with Alarm)	N: None T: Transistor 電晶體 R: Relay 繼電器 (with 2 sets of Alarms)	05: DC 5V 12: DC 12V	LD: Line Driver NP: NPN PN: PNP	A: 90 ~ 260Vac D: 18 ~ 60Vdc

CA

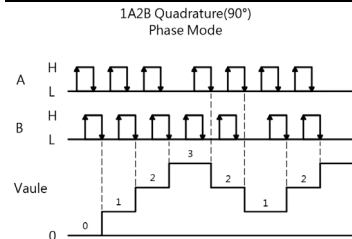
CONTROLLER METER HIGH SPEED



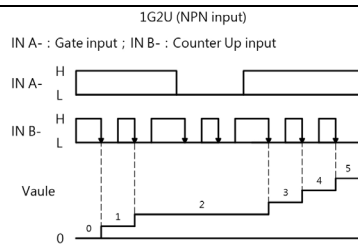
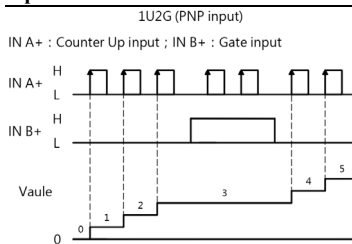
- DIN W99 X H51 Counter
- Display Six Digits -999999 ~ 999999
- Adjustable Ratio of Signal/Angle 0.00001~9.99999
- Selectable Length or Angle count
- With RS485 and 16 bit Analog Output
- Alert Mode N/F/R/Q/C/P/K/Hi/Lo/Area
- Power Supply AC90~280V / DC 18~60V
- Strong Anti-Interference
- High Speed Counting Frequency

In. mod 輸入模式與計數值 (SYS ④)

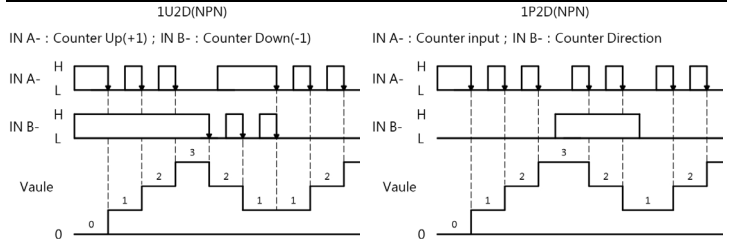
Phase Mode



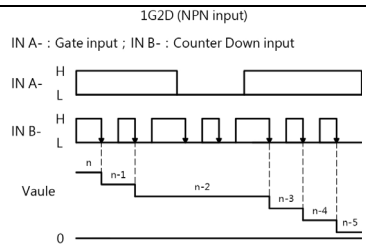
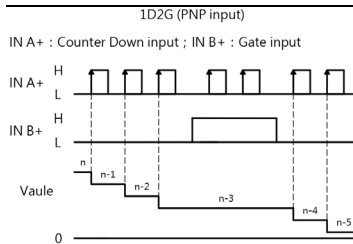
Up Mode



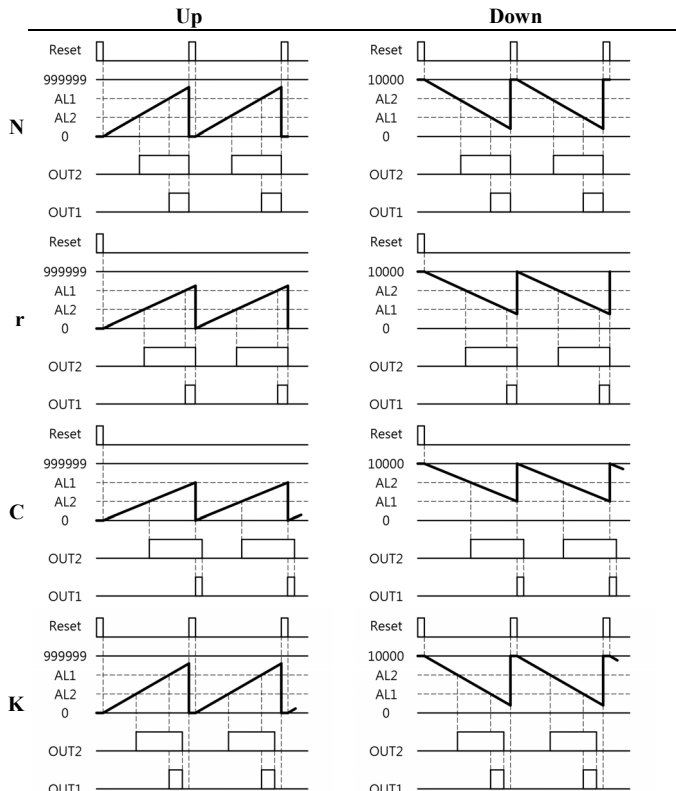
Up / Down Mode



Down Mode



AL. mod 警報模式 (roP ⑤)





- DIN W99 X H51 Counter
- Display Six Digits -999999 ~ 999999
- Adjustable Ratio of Signal/Angle 0.00001~9.99999
- Selectable Length or Angle count
- With RS485 and 16 bit Analog Output
- Alert Mode N/F/R/Q/C/P/K/HI/LO/Area
- Power Supply AC90~280V / DC 18~60V
- Strong Anti-Interference
- High Speed Counting Frequency

RS-485 Modbus RTU Mode Protocol Address Map

Address	R/W	Display	Default	格式	Parameter	Description
0000H	R/W	In. Mode	6	UINT16	0 ~ 6	Input Mode 輸入模式 0: 1U2G, 1: 1G2U, 2: 1D2G, 3: 1G2D, 4: 1U2D, 5: 1P2D, 6: 1A2B
0001H	R/W	ACCU	1	UINT16	0 ~ 2	Multiplication 分割倍率 0000 ~ 0002 (0: X1, 1: X2, 2: X4)
0002H	R/W	LOCK	0	UINT16	0-1	Key Locking 按鍵鎖定 0000~0001(0: NO, 1: YES)
0004H	R/W	Code	0	UINT32	0 ~ 99999	User's Password High Position 進入密碼高位 0 ~ F423F(-999999 ~ 999999) High Word 高位字組
0005H	R/W		0	----	----	User's Password Low Position 進入密碼低位 0 ~ F423F(-999999 ~ 999999) Low Word 低位字組
0006H	R/W	OPMODE	0	UINT16	0 ~ 9	ALRAM Output Mode 報警輸出模式, 0000 ~ 000A (0:N, 1:F, 2:R, 3:Q, 4:C, 5:P, 6:K, 7:HiHi, 8:LoLo, 9: Area)
0007H	R/W	dEL1	0	UINT16	0 ~ 999	AL1 ALRAM Time 警報時間 000 ~ 03E7 (0.0s 自保持 / 0~99.9s Delay Time 延遲輸出)
0008H	R/W	dEL2	0	UINT16	0 ~ 999	AL2 ALRAM Time 警報時間 0000 ~ 03E7 (0.0s 自保持 / 0~99.9s Delay Time 延遲輸出)
0009H	R/W	Addr	1	UINT16	0 ~ 255	IP Address 位址 0000~ 00FF
000AH	R/W	BAUD	2	UINT16	0 ~ 4	BAUD Rate 通訊速率 0000~0004 (0: 4800, 1: 9600, 2: 19200, 3: 38400, 4: 57600)
000BH	R/W	PARI	3	UINT16	0 ~ 5	Parity 同步位元 0000~0005 (0: 8N1, 1: 8O1, 2: 8E1, 3: 8N2, 4: 8O2, 5: 8E2)
000FH	R/W	RST.T	10	UINT16	1 ~ 999	RST Input Setting Time 外部重置計時時間 0001 ~ 03E7H (0 ~ 999ms)
0011H	R/W	PPr	360	UINT16	1 ~ 60000	Pulse per Revolution(only for Angle Count) 解析度(僅用於角度計數模式) 0001 ~ EF60H
0013H	R/W	AL1	0	INT32	-999999 ~ 999999	AL1 Set High Byte 設定值高位 FFF0BDC1 ~ F423F High Word 高位字組
0014H	R/W		0	----	----	AL1 Set Low Byte 設定值低位 FFF0BDC1 ~ F423F Low Word 低位字組
0015H	R/W	AL2	0	INT32	-999999 ~ 999999	AL2 Set High Word 設定值高位 FFF0BDC1 ~ F423F High Word 高位字組
0016H	R/W		1000	----	----	AL2 Set Low Word 設定值低位 FFF0BDC1 ~ F423F Low Word 低位字組
0017H	R/W	DP	1	UINT16	0 ~ 5	Decimal Point 小數點位置 0000 ~ 0005 (0: 100, 1: 10-1, 2: 10-2, 3: 10-3, 4: 10-4, 5: 10-5)
0018H	R/W	SCALE	1	INT32	1 ~ 999999	SCALE Value Setting High Word 比例值高位 0001 ~ 000F423F High Word 高位字組
0019H	R/W		34464	----	----	SCALE Value Setting Low Word 比例值低位 0001 ~ 000F423F Low Word 低位字組
001AH	R/W	DIV	1	UINT16	1 ~ 10000	Divisor Value Setting 除數值設定 1 ~ 2710H (1 ~ 10000)

CONTROLLER METER HIGH SPEED



- DIN W99 X H51 Counter
- Display Six Digits -999999 ~ 999999
- Adjustable Ratio of Signal/Angle 0.00001~9.99999
- Selectable Length or Angle count
- With RS485 and 16 bit Analog Output
- Alert Mode N/F/R/Q/C/P/K/HI/LO/Area
- Power Supply AC90~280V / DC 18~60V
- Strong Anti-Interference
- High Speed Counting Frequency

RS-485 Modbus RTU Mode Protocol Address Map

Address	R/W	Display	Default	格式	Parameter	Description
001BH	R/W	RST.V	0	INT32	-999999 ~ 999999	Reset Value Setting High Word 重置高位設定 FFF0BDC1 ~ F423F High Word 高位字組
001CH	R/W		0	----	----	Reset Value Setting Low Word 重置低位設定 FFF0BDC1 ~ F423F Low Word 低位字組
001DH	R/W	HYS1	0	UINT32	0 ~ 999999	AL1 Hysteresis Value High Word 遲滯值高位 0 ~ F423F (0 ~ 999999) High Word 高位字組
001EH	R/W		0	----	----	AL1 Hysteresis Value Low word 遲滯值低位 0 ~ F423F (0 ~ 999999) Low Word 低位字組
001FH	R/W	HYS2	0	UINT32	0 ~ 999999	AL2 Hysteresis Value High Word 遲滯值高位 0 ~ F423F (0 ~ 999999) High Word 高位字組
0020H	R/W		0	----	----	AL2 Hysteresis Value Low Word 遲滯值低位 0 ~ F423F (0 ~ 999999) Low Word 低位字組
0021H	R/W	ANLO	0	INT32	-999999 ~ 999999	Analog Output is High in min. Value 類比輸出最小值高位 FFF0BDC1 ~ F423F (-999999 ~ 999999) High Word 高位字組
0022H	R/W		0	----	----	Analog Output is Low in min. Value 類比輸出最小值低位 FFF0BDC1 ~ F423F (-999999 ~ 999999) Low Word 低位字組
0023H	R/W	ANHI	0	INT32	-999998 ~ 999999	Analog Output is High in max. Value 類比輸出最大值高位 FFF0BDC2 ~ F423F (-999999 ~ 999999) High Word 高位字組
0024H	R/W		1000	----	----	Analog Output is low in max. Value 類比輸出最大值低位 FFF0BDC2 ~ F423F (-999999 ~ 999999) Low Word 低位字組
0027H	R	Disp		INT32	-999999 ~9 99999	Display the High Word 顯示值高位 FFF0BDC2 ~ F423F High Word 高位字組
0028H	R			----	----	Display the Low Word 顯示值低位 FFF0BDC2 ~ F423F Low Word 低位字組
0029H	R	STATUS	0	UINT16		ALRAM Status 警報狀態 0001: AL1, 0010: AL2
002AH	R/W	RST	0	UINT16	0-1	External Resets for Alarm and Display 外部警報/顯示值重置 0000: NO, 0001: YES