

微電腦型交流電流異常警報電錶(48x96mm) (MICROPROCESS AC CURRENT MONITOR METER, 48x96mm)

**MODEL
MCM**


■特點(FEATURES)

- 精確度0.25%滿刻度 ± 1 位數(Accuracy 0.25% F.S. ± 1 digit)
- 輸入配線系統可任意選擇(1 ϕ 2W, 3 ϕ 3W)(Input measurement network can be selective(1 ϕ 2W, 3 ϕ 3W))
- CT比可任意設定(1至2000)(CT rate can be modified (1 to 2000))
- 電流過高或過低檢測可任意設定(Over and under current monitoring can be modified)
- 俱有異常電流值與異常次數記錄保留功能(Anomalism current and anomalism time (max.9 times) can be recode)
- 警報繼電器復歸方式可任意設定(Output relay reset type can be modified)
- 尺寸小、穩定性高(Dimension small and High stability)

1.MODEL:MCM

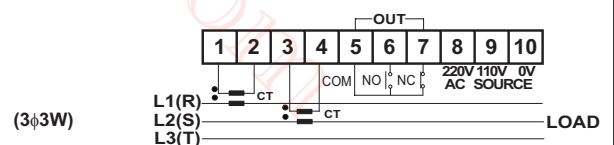
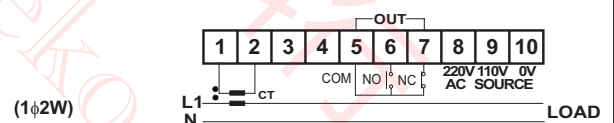
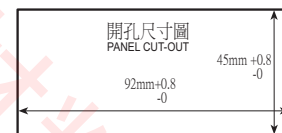
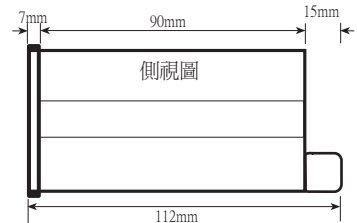
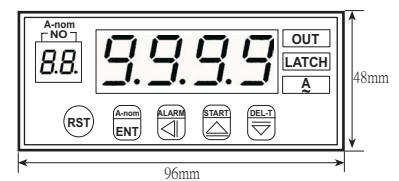
(選購型號)

2.SPECIFICATION (主要規格)

- Aux. power supply : AC110V $\pm 220V \pm 20\%$ (50 or 60Hz)
(輔助電源)
- Measuring accuracy : 0.25% F.S. ± 1 digit
(精確度) (23 $\pm 5^\circ\text{C}$)
- Input burden : <0.2VA (Current)
(輸入負載)
- Maximum input over : Current related input: 2 x rated continuous
(最大過載能力) 10 x rated 30 sec. 25 x rated 3sec.
50 x rated 1 sec.
- Input current range : AC0~5A (10~1000Hz)
(輸入電流範圍)
- CT ratio : 1~2000 adjustable
(輸入電流範圍)
- Start delay time : 0~99.9 second adjustable
(起動延遲動作時間)
- Alarm delay time : 0~99.9 second adjustable
(繼電器延遲動作時間)
- Output reset type : Manual (N)/latch(L) can be modified
(繼電器復歸方式)
- Alarm hysteresis range : 0~999 digit adjustable
(繼電器磁滯範圍)
- Alarm action : HI or Lo adjustable
(繼電器動作方向)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Over input indication : "doFL"
(過載顯示)
- Temp. coefficient : 50ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
(溫度係數)
- Display : Red high efficiency LEDs high 14.22mm(0.56")(PV)
(顯示幕) Red high efficiency LEDs high 7.11mm(0.276")(NO)
- Parameter setting : Touch switches
(參數設定方式)
- Memory mode : Non-volatile E² PROM memory
(記憶型式)
- Dielectric strength : 2KVac/1 min. (input/output/power)
(絕緣耐壓能力) 1600Vdc(input/output)
- Surge test : ANSI C37.90a/1974,DIN-IEC 255-4
(突波測試) impulse voltage 4KV(1.2x50us)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(存放環境條件)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A
(CE認證) EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型盤面式異常警報電錶(48x96mm)

(MICROPROCESS PANEL MONITOR METER, 48x96mm)

MODEL
MCM-1

■特點(FEATURES)

- 精確度0.1%滿刻度 ± 1 位數(Accuracy 0.1% F.S. ± 1 digit)
- 可量測 交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍-1999~9999可任意規劃(Programmable rate -1999~9999 digit)
- 俱有異常值與異常次數記錄保留功能(Anomalism current and anomalism time (max.9 times) can be recode)
- 異常信號過高或過低或範圍內或範圍外檢測可任意設定(Over/under/over and under/band monitoring can be modified)
- 尺寸小,穩定性高(Dimension small and High stability)

1.MODEL:MCM-1 - ☐ ☐ ☐
(選購型號)

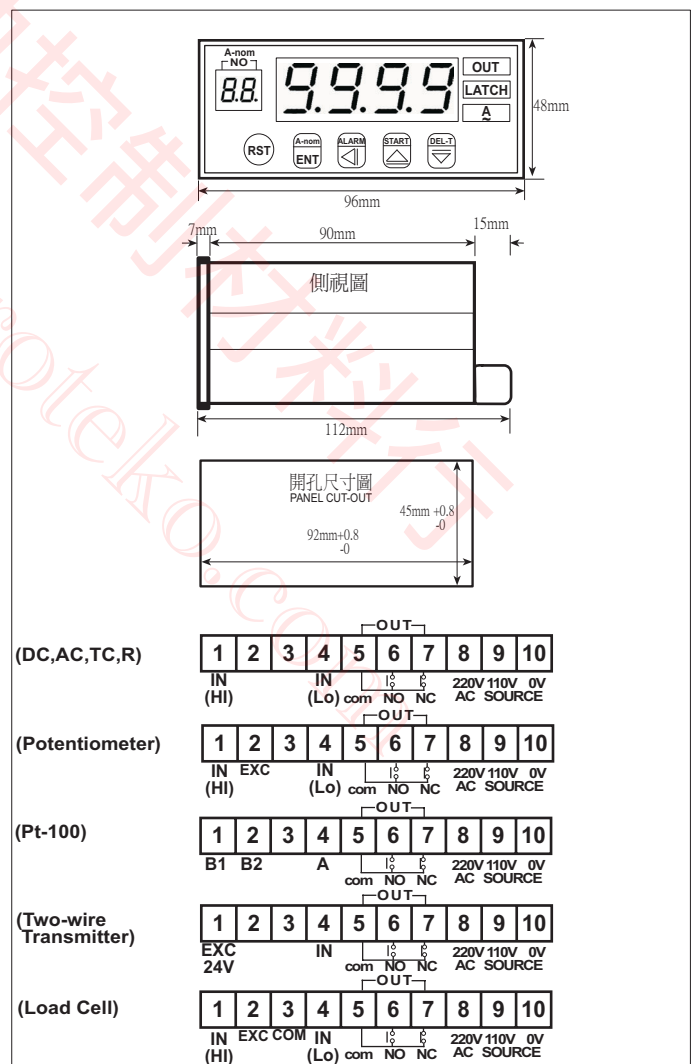
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	Aux. Power
A	DC	11	0~50mV	21	0~9.999uA	31	0~10%	41	DC4~20mA	51	-50.0~+50.0°C	61	2mV/V	A	AC110/220V
B	AC(RMS)	12	0~5V	22	0~99.99uA	32	0~50%	42	DC1~5V	52	-100.0~+100.0°C	62	3mV/V	B	SPECIFIED
C	AC(TRMS)	13	0~10V	23	0~999.9uA	33	0~100%	43	DC4~20mA	53	-199.9~+199.9°C	63	2mV/V	•20% of rate less 3VA for AC input (50/60Hz)	
D	Potentiometer	14	0~36V	24	0~9.999mA	34	5~95%	44	DC1~5V	54	0~+850.0°C	64	3mV/V		
E	Transmitter	15	0~54V	25	0~99.99mA	35	10~90%	49	SPECIFIED	55	-199.9~+850.0°C	69	SPECIFIED		
F	Pt-100(RTD)	16	0~110V	26	0~2.000A	39	SPECIFIED	•41/42 nonexciting DC24V •43/44 exciting DC24V ($<25mA$)	59	SPECIFIED	•61/62 Exciting DC5V($<100mA$) •63/64 Exciting DC10V($<50mA$)				
H	Load Cell	17	0~600V	27	0~5.000A	•Three wire connection •Exciting voltage DC2.5V($<10mA$)				•Three wire connection					
R	Resistor	18	0~1000V	28	0~9.999A										
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED										

2.SPECIFICATION (主要規格)

- Aux. power supply : AC110V&220V $\pm 20\%$ (50 or 60Hz)
(輔助電源)
- Measuring accuracy : 0.1% F.S. ± 1 digit
(精確度) (23 $\pm 5^\circ C$) 0.2% F.S. ± 1 digit(AC)
- Sampling time : 4 cycles/sec.
(取樣時間)
- Readout range : -1999~+9999 digit adjustable
(顯示值範圍)
- Start delay time : 0~99.9 second adjustable
(起動延遲動作時間)
- Alarm delay time : 0~99.9 second adjustable
(繼電器延遲動作時間)
- Alarm hysteresis range : 0~999 digit adjustable
(繼電器磁滯範圍)
- Alarm action : HI /LO/GO/HL can be modified
(繼電器動作方向)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Over input indication : "doFL"
(過載顯示)
- Temp. coefficient : 50ppm/ $^\circ C$ (0~50 $^\circ C$)
(溫度係數)
- Display : Red high efficiency LEDs high 14.22mm(0.56")(PV)
(顯示幕) Red high efficiency LEDs high 7.0mm(0.276")(NO)
- Parameter setting : Touch switches
(參數設定方式)
- Memory mode : Non-volatile E² PROM memory
(記憶型式)
- Dielectric strength : 2KVac/1 min. (input/output/power)
(絕緣耐壓能力) 1600Vdc(input/output)
- Operating condition : 0~50 $^\circ C$ (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70 $^\circ C$ (20 to 90% RH non-condensed)
(存放環境條件)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A
(CE認證) EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型盤面式控制電錶(24x48mm)

(MICROPROCESS PANEL CONTROLLER METER)(24x48mm)

**MODEL
MMX-AS**

CE



■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可量測 交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍-19999~99999可任意規劃(Programmable rate -19999~99999 digit)
- 具有自動歸零/保持/開根號功能(Auto zero/hold/Square root function)
- 2組警報功能(Max. two alarm function)(optional)
- 16BIT 類比輸出功能(16 bit DAC analog output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(optional)

1.MODEL:MMX-AS ☐ ☐ ☐ - ☐ ☐ ☐ ☒ X=H(Hold measuring value function),X=M(Hold maximum measuring value function),X=S(Square root function)
(選購型號)

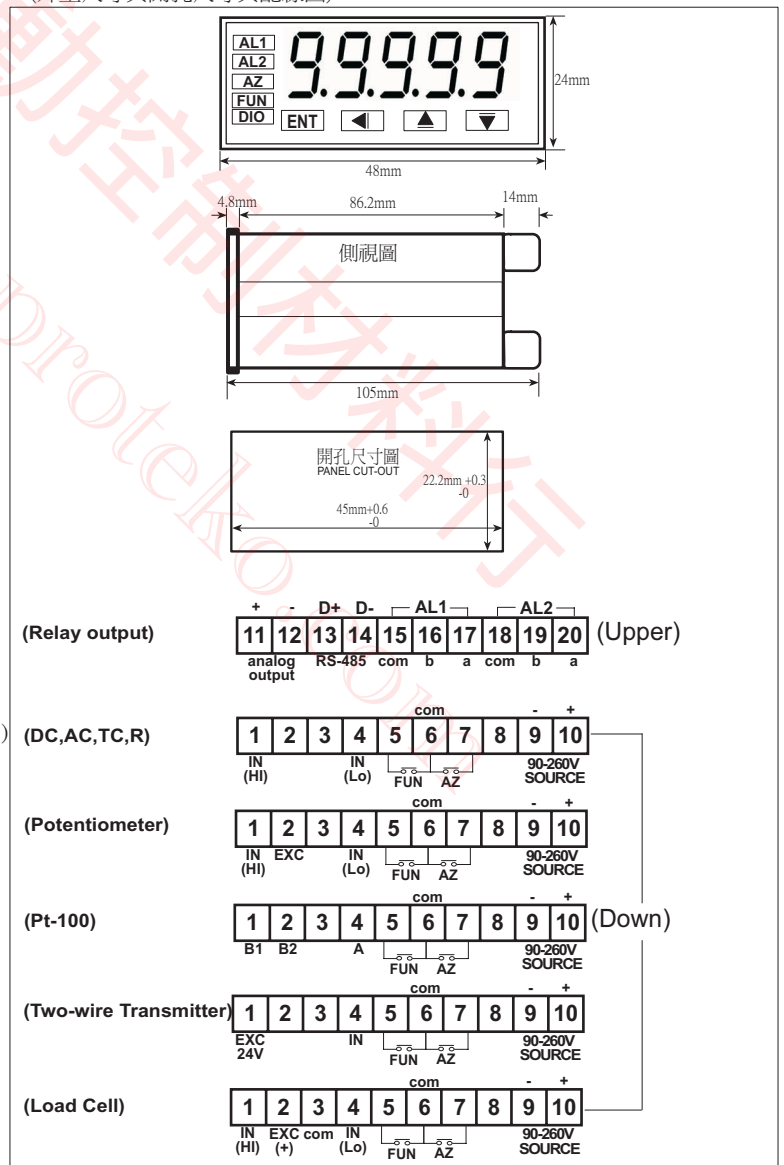
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Transmitter	NO	Load Cell	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power				
A	DC	11	0~50mV	21	0~19.999uA	41	DC4~20mA	61	2mV/V	0	None	0	None	N	None	A	AC/DC18~60V				
B	AC(RMS)	12	0~5V	22	0~199.99uA	42	DC1~5V	62	3mV/V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V				
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	43	DC4~20mA	63	2mV/V	2	Two	2	DC0~10V	*Modbus mode			* Less 4VA for AC/DC input				
D	Potentiometer	14	0~36V	24	0~19.999mA	44	DC1~5V	64	3mV/V			9	SPECIFIED								
E	Transmitter	15	0~54V	25	0~199.99mA	49	SPECIFIED	69	SPECIFIED	*Relay contact (AC250V-2.5A, DC30V-5A)											
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A																
G	Thermocouple	17	0~600V	27	0~5.000A																
H	Load Cell	19	SPECIFIED	29	SPECIFIED																
R	Resistor																				

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S. ± 1 digit (23 $\pm 5^{\circ}\text{C}$)
0.2% F.S. ± 1 digit(AC(RMS))
0.2% F.S. $\pm 0.5^{\circ}\text{C}$ (CIC)(Thermocouple)
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : -19999~99999 digit adjustable
- Alarm delay time (繼電器延遲動作時間) : 0~99.9 second adjustable
- Alarm action (繼電器動作方向) : HI or Lo adjustable
- Relay contact output (繼電器容量) : AC 250V-2.5A, DC 30V-5A
- Analog output resolution (類比輸出解析度) : 16 bit DAC
- Response time (輸出反應速度) : < 250ms(0~90%)
- Output drive capability (輸出負載能力) : < 10mA for voltage mode
< 10V for current mode
- Output ripple (p-p) (輸出之漣波) : < 0.1% F.S.
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Temp. coefficient (溫度係數) : 50ppm/ $^{\circ}\text{C}$ (0~50 $^{\circ}\text{C}$)
- Display (顯示幕) : Red high efficiency LEDs high 10.16mm(0.4")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 1.5KVac/1 min. (input/output/power)
1600 Vdc (input/output)
- Operating condition (使用環境條件) : 0~50 $^{\circ}\text{C}$ (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70 $^{\circ}\text{C}$ (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型盤面式控制電錶(顯示幕0.56") (MICROPROCESS PANEL CONTROLLER METER)(DISPLAY 0.56")

**MODEL
MM2**


■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可量測交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍0~ ± 19999 可任意規劃(Programmable rate 0 to ± 19999 digit)
- 具有自動歸零與保持(開根號)功能(Auto zero and hold (math-root extractor) function)
- 具有9段線性折補功能(Correction for non-linearity function(9 segments))(optional)
- 4組警報功能(Max. four alarm function)(optional)
- 15BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(optional)

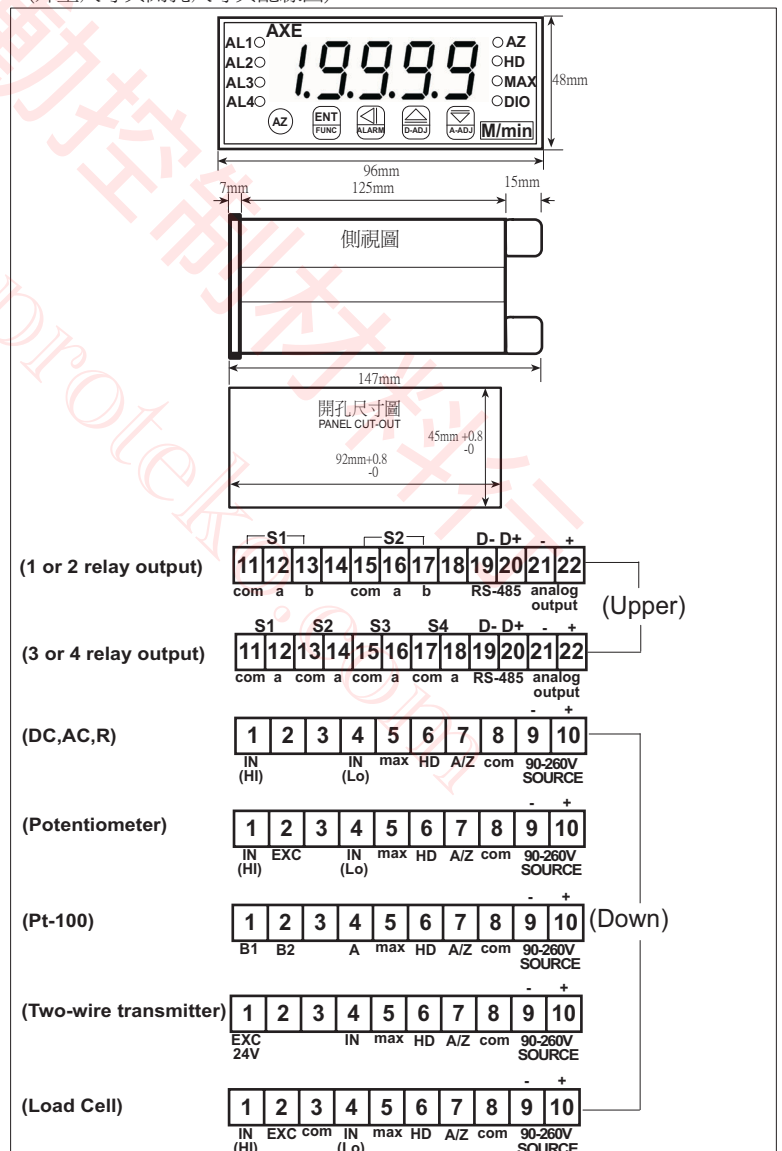
1.MODEL:MM2-☐☐☐-☐☐☐☐ (選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	11	0~50mV	21	0~19.999 μ A	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99 μ A	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V				
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	3	Three	3	DC4~20mA				
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	4	Four	9	SPECIFIED				
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A	39	SPECIFIED										
H	Load Cell	17	0~600V	27	0~5.000A												
L	LVDT	18	0~1000V	28	0~10.000A												
R	Resistor	19	SPECIFIED	29	SPECIFIED												

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S. ± 1 digit (23 $\pm 5^{\circ}$ C) 0.2% F.S. ± 1 digit(AC(RMS))
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : 0~ ± 19999 digit adjustable
- Alarm delay time (繼電器延遲動作時間) : 0~99.9 second adjustable
- Alarm action (繼電器動作方向) : HI or Lo adjustable
- Relay contact output (繼電器容量) : AC 250V-5A, DC 30V-7A
- Analog output resolution (類比輸出解析度) : 15 bit DAC
- Response time (輸出反應速度) : < 250ms(0~90%)
- Output drive capability (輸出負載能力) : < 10mA for voltage mode < 10V for current mode < [(V+)-7.5V]/20mA for two-wire mode
- Output ripple (p-p) (輸出之漣波) : < 0.1% F.S.
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Temp. coefficient (溫度係數) : 50ppm/ $^{\circ}$ C (0~50 $^{\circ}$ C)
- Display (顯示幕) : Red high efficiency LEDs high 14.22mm(0.56")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output/power) 1600 Vdc (input/output)
- Operating condition (使用環境條件) : 0~50 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70 $^{\circ}$ C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



5位數微電腦型盤面式控制電錶(顯示幕0.8") (MICROPROCESS PANEL CONTROLLER METER)(DISPLAY 0.8")

**MODEL
MMX-A**


■特點(FEATURES)

- 精確度0.05%滿刻度±1位數(Accuracy 0.05% F.S.±1digit)
- 可量測 交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍-19999~99999可任意規劃(Programmable rate -19999~99999 digit)
- 具有自動歸零或保持(開根號)功能(Auto zero or hold (ROOT)function)
- 4組警報功能(Max. four alarm function)(optional)
- 16BIT 類比輸出功能(16 bit DAC analog output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(optional)

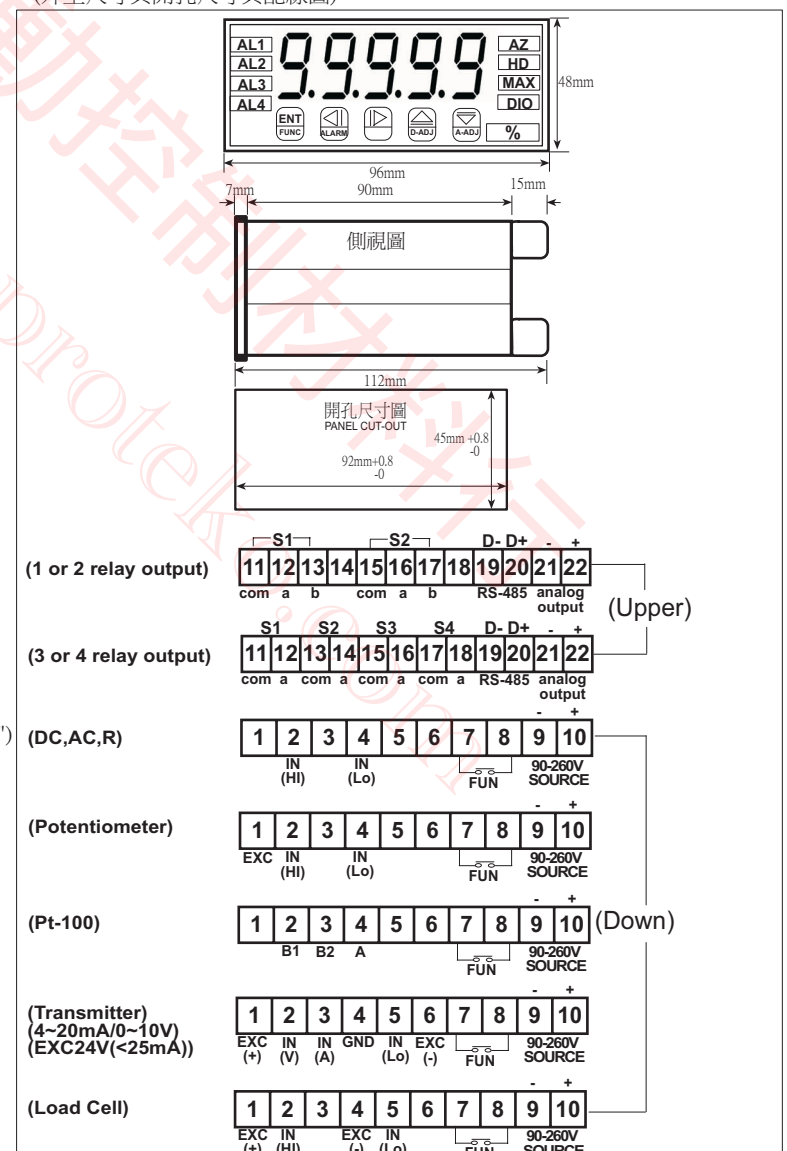
1.MODEL:MMX-A ☐ ☐ - ☐ ☐ ☐ ☒ X=A(Auto zero function),X=H(Hold measuring value function),X=M(Hold maximum measuring value function)
(選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power			
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V			
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V			
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V	●Modbus mode ●256 nodes on bus			●Less 5VA for AC/DC input			
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	3	Three	3	●DC4~20mA							
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	4	Four	9	SPECIFIED	●Two-wire transmitter (Exciting voltage DC10~36V)						
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A	39	SPECIFIED	●41/42 nonexciting DC24V	●Relay contact (AC250V-5A,DC30V-7A)											
H	Load Cell	17	0~600V	27	0~5.000A	●Three wire connection		●43/44 exciting DC24V(<25mA)												
R	Resistor	18	0~1000V	28	0~10.000A	●Exciting voltage DC2.5V(<10mA)														
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED															

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) (23±5℃) : 0.05% F.S.±1 digit
0.2% F.S.±1 digit(AC(RMS))
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : -19999~99999 digit adjustable
- Alarm delay time (繼電器延遲動作時間) : 0~99.9 second adjustable
- Alarm action (繼電器動作方向) : HI or Lo adjustable
- Relay contact output (繼電器容量) : AC 250V-5A, DC 30V-7A
- Analog output resolution (類比輸出解析度) : 16 bit DAC
< 10V for current mode
< 10mA for voltage mode
< [(V+)-7.5V]/20mA for two-wire mode
< 0.1% F.S.
- Response time (輸出反應速度) : < 250ms(0~90%)
- Output drive capability (輸出負載能力) : < 10mA for voltage mode
< 10V for current mode
< [(V+)-7.5V]/20mA for two-wire mode
< 0.1% F.S.
- Output ripple (p-p) (輸出之漣波) : < 0.1% F.S.
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Temp. coefficient (溫度係數) : 50ppm/°C (0~50°C)
- Display (顯示幕) : Red high efficiency LEDs high 20.32mm(0.8")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output/power)
1600 Vdc (input/output)
- Operating condition (使用環境條件) : 0~50°C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70°C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



微電腦型盤面式控制電錶(顯示幕0.4") (MICROPROCESS PANEL CONTROLLER METER)(DISPLAY 0.4")

**MODEL
MM2S**


■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可量測 交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍0~ ± 19999 可任意規劃(Programmable rate 0 to ± 19999 digit)
- 數位化指撥設定操作簡易(Simulation pushwheel digit switches,easy to operate)
- 具有自動歸零與保持功能(Auto zero and hold function)
- 4組警報功能(Max. four alarm function)(optional)
- 15BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(optional)

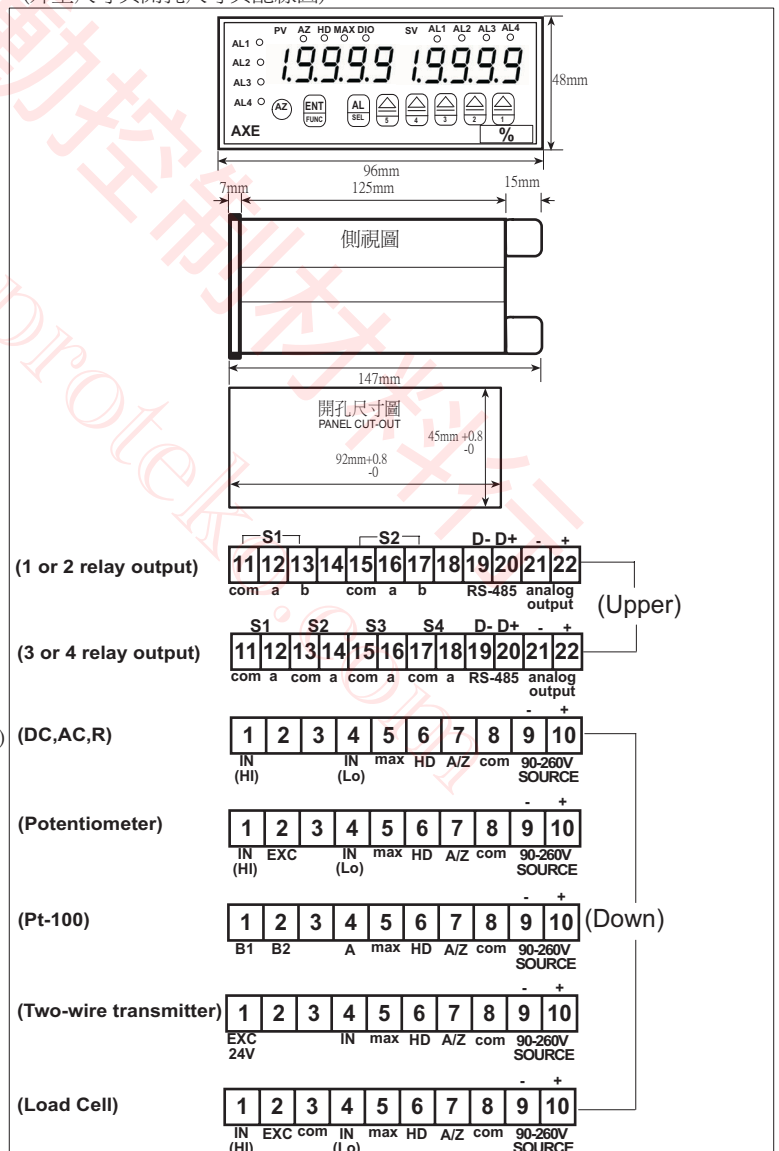
1.MODEL:MM2S-□ □ □ - □ □ □ □ (選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power				
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V				
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V				
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V	●Modbus mode ●256 nodes on bus			● Less 4VA for AC/DC input				
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	3	Three	3	●DC4~20mA								
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	4	Four	9	SPECIFIED								
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A	39	SPECIFIED	●41/42 nonexciting DC24V ●43/44 exciting DC24V(<25mA)		●Relay contact (AC250V-5A,DC30V-7A)		●Two-wire transmitter (Exciting voltage DC10~36V)									
H	Load Cell	17	0~600V	27	0~5.000A	●Three wire connection ●Exciting voltage DC2.5V(<10mA)															
L	LVDT	18	0~1000V	28	0~10.000A																
R	Resistor	19	SPECIFIED	29	SPECIFIED																

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S. ± 1 digit (23 $\pm 5^{\circ}$ C) 0.2% F.S. ± 1 digit(AC(RMS))
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : 0~ ± 19999 digit adjustable
- Alarm delay time (繼電器延遲動作時間) : 0~99.9 second adjustable
- Alarm action (繼電器動作方向) : HI or Lo adjustable
- Relay contact output (繼電器容量) : AC 250V-5A, DC 30V-7A
- Analog output resolution (類比輸出解析度) : 15 bit DAC
- Response time (輸出反應速度) : < 250ms(0~90%)
- Output drive capability (輸出負載能力) : < 10mA for voltage mode
< 10V for current mode
< [(V+)-7.5V]/20mA for two-wire mode
- Output ripple (p-p) (輸出之漣波) : < 0.1% F.S.
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Temp. coefficient (溫度係數) : 50ppm/ $^{\circ}$ C (0~50 $^{\circ}$ C)
- Display (顯示幕) : Red high efficiency LEDs high 10.16mm(0.4")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output/power)
1600 Vdc (input/output)
- Operating condition (使用環境條件) : 0~50 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70 $^{\circ}$ C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



5位數微電腦型盤面式控制電錶(指撥開關設定型)

(MICROPROCESS PANEL CONTROLLER METER)(PUSHWHEEL TYPE)

**MODEL
MMX-AP**


■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可量測 交直流電流/交直流電壓/電位計/傳送器/Pt-100/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Load Cell/Resistor/etc.....)
- 顯示範圍-19999~99999可任意規劃(Programmable rate-19999 to 99999 digit)
- 具有自動歸零或保持功能(Auto zero or hold function)
- 操作簡易(指撥開關設定)(Pushwheel digit switches setting easy to operate)
- 2組警報功能(Dual alarm function)(optional)
- 尺寸小,穩定性高(Dimension small and High stability)

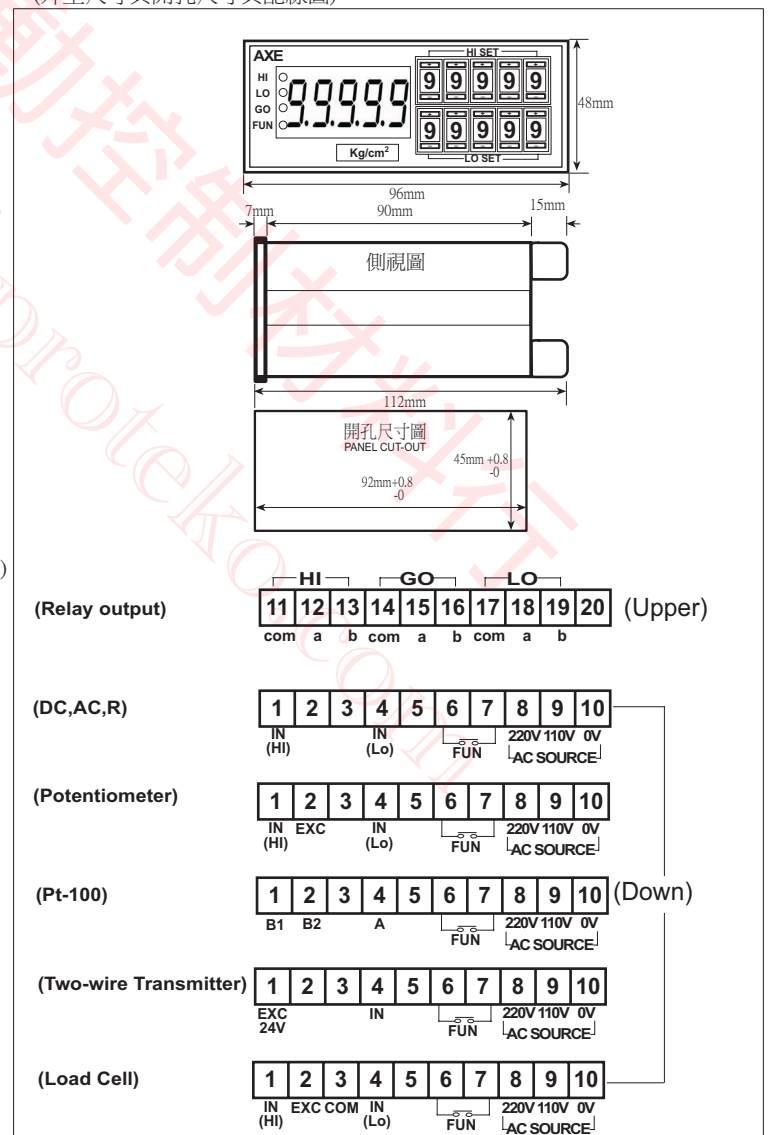
1.MODEL:MMX-AP ☐ ☐ - ☐ ☐ ☒ $\Rightarrow$ X=4 (4 digit setting, -9999~+9999), X=5 (5 digit setting, 0~99999)
(選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	Alarm output	NO	Aux. Power	
A	DC	11	0~50mV	21	0~9.9999uA	31	0~10%	41	DC4~20mA	51	-50.00~+50.00°C	61	2mV/V	1	One	A	AC110/220V	
B	AC(RMS)	12	0~5V	22	0~99.999uA	32	0~50%	42	DC1~5V	52	-100.00~+100.00°C	62	3mV/V	2	Two	B	SPECIFIED	
C	AC(TRMS)	13	0~10V	23	0~999.99uA	33	0~100%	43	DC4~20mA	53	-200.0~+400.0°C	63	2mV/V	●Relay contact (AC250V-5A,DC30V-7A)		●±20% of rate less 4VA for AC input (50/60Hz)		
D	Potentiometer	14	0~36V	24	0~9.9999mA	34	5~95%	44	DC1~5V	54	-200.0~+850.0°C	64	3mV/V					
E	Transmitter	15	0~54V	25	0~99.999mA	35	10~90%	49	SPECIFIED	59	SPECIFIED	69	SPECIFIED					
F	Pt-100(RTD)	16	0~110V	26	0~999.99mA	39	SPECIFIED	●41/42 nonexciting DC24V		●Three wire connection		●61/62 Exciting DC5V(<100mA)						
H	Load Cell	17	0~600V	27	0~5.000A	●Three wire connection ●Exciting voltage DC2.5V(<10mA)		●43/44 exciting DC24V(<25mA)				●63/64 Exciting DC10V(<50mA)						
L	LVDT	18	0~1000V	28	0~9.9999A													
R	Resistor	19	SPECIFIED	29	SPECIFIED													

2.SPECIFICATION (主要規格)

- Aux. power supply : AC110V&220V $\pm 20\%$ (50 or 60Hz)
(輔助電源)
- Measuring accuracy : 0.05% F.S. ± 1 digit
(精確度) (23 $\pm 5^\circ\text{C}$) 0.2% F.S. ± 1 digit(AC(RMS))
- Sampling time : 16 cycles/sec.
(取樣時間)
- Readout range : -19999~99999 digit adjustable
(顯示值範圍)
- Setting range : -9999~+9999 digit adjustable (4 digit setting)
(設定值範圍) 0~99999 digit adjustable (5 digit setting)
- Compaer setting methods : Pushwheel digital switches
(比較值設定方式)
- Alarm action : HI or Lo adjustable
(繼電器動作方向)
- Compare hysteresis : 0~999 digit adjustable
(比較不感帶)(deadband)
- Alarm delay time : 0~99.9 second adjustable
(繼電器延遲動作時間)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Temp. coefficient : 50ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
(溫度係數)
- Display : Red high efficiency LEDs high 10.16 mm(0.4")
(顯示幕)
- Parameter setting : Touch switches
(參數設定方式)
- Memory mode : Non-volatile E² PROM memory
(記憶型式)
- Dielectric strength : 2KVac/1 min. (input/output/power)
(絕緣耐壓能力) 1600 Vdc (input/output)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(存放環境條件)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A
(CE認證) EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



微電腦型雙顯示幕控制電錶

(MICROPROCESS DUAL DISPLAY PANEL CONTROLLER METER)

MODEL
MM2D

■特點(FEATURES)

- 精確度0.1%滿刻度 ± 1 位數(Accuracy 0.1% F.S. ± 1 digit)
- 可同時量測與顯示交直流電壓/交直流電流(Dual input measuring and display DCA/DCV/ACA/ACV)
- 顯示範圍0~ ± 19999 可任意規劃(Programmable rate 0 to ± 19999 digit)
- 類比輸出運算功能(Analog output math-function(IN1,IN2,IN1+IN2,IN1-IN2,IN1xIN2,IN1/IN2))
- 2組獨立警報功能(Two alarm function)(optional)
- 15 BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(optional)

1.MODEL:MM2D-

(選購型號)

NO	Input Type	NO	Input1 Range	NO	Input2 Range	NO	Input1 Alarm	NO	Input2 Alarm	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	1	0~50mV	1	0~50mV	0	None	0	None	0	None	N	None	A	AC/DC18~60V
B	AC	2	0~20V	2	0~200mA	1	One	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
		3	0~150V	3	0~2A	2	Two	2	Two	2	DC0~10V				
		4	0~300V	4	0~5A					3	•DC4~20mA		•Modbus mode		•Less 4VA for AC/DC input
		9	SPECIFIED	9	SPECIFIED					9	SPECIFIED		•256 nodes on bus		

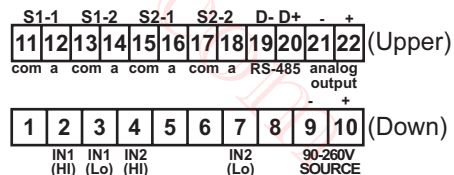
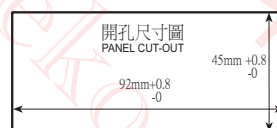
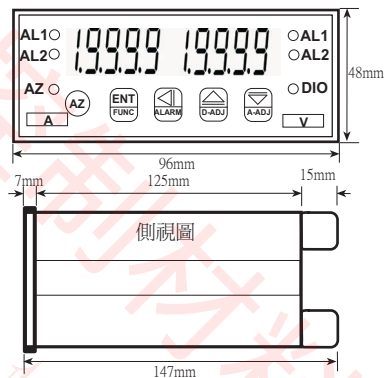
*Two-wire transmitter (Exciting voltage DC10~36V)

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.1% F.S. ± 1 digit
(精確度) (23 $\pm 5^\circ\text{C}$) 0.2% F.S. ± 1 digit(AC)
- Readout range : 0~ ± 19999 digit adjustable
(顯示值範圍)
- Alarm delay time : 0~99.9 second adjustable
(繼電器延遲動作時間)
- Alarm action : HI or Lo adjustable
(繼電器動作方向)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Analog output resolution : 15 bit DAC
(類比輸出解析度)
- Response time : < 250ms(0~90%)
(輸出反應速度)
- Output drive capability : < 10mA for voltage mode
(輸出負載能力) < 10V for current mode
< [(V+)-7.5V]/20mA for two-wire mode
- Output ripple (p-p) : < 0.1% F.S.
(輸出之漣波)
- RS-485 address : "01"~"FF"(0~255)
(通訊位址)
- RS-485 baud rate : 19200/9600/4800/2400 selective
(傳輸速度)
- RS-485 protocol : Modbus RTU mode
(通信協議)
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
(溫度係數)
- Display : Red high efficiency LEDs high
(顯示幕) 10.18 mm(0.4")
- Parameter setting : Touch switches
(參數設定方式)
- Memory mode : Non-volatile E² PROM memory
(記憶型式)
- Dielectric strength : 2KVac/1 min. (input1/input2/output/power)
(絕緣耐壓能力) 1600 Vdc (input/output)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90% RH non-condensed)
(存放環境條件)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A
(CE認證) EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

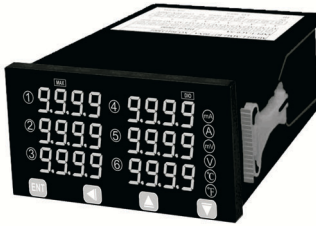
3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型6組類比輸入盤面式電錶 (MICROPROCESS 6 CHANNEL ANALOG INPUT PANEL METER)

**MODEL
MM8A**



■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可同時量測與顯示六組直流電壓/電流/Pt-100/熱電偶等信號...
(Measuring six channel DCA/DCV/Pt-100/Thermocouple/etc...)
- 顯示範圍-1999~9999可任意規劃(Programmable rate -1999 to 9999 digit)
- 輸入組數(1至6)可任意規劃(Input channel number(1~6) can be modified)
- 數位RS-485界面(Digit Rs-485 interface function)(optional)

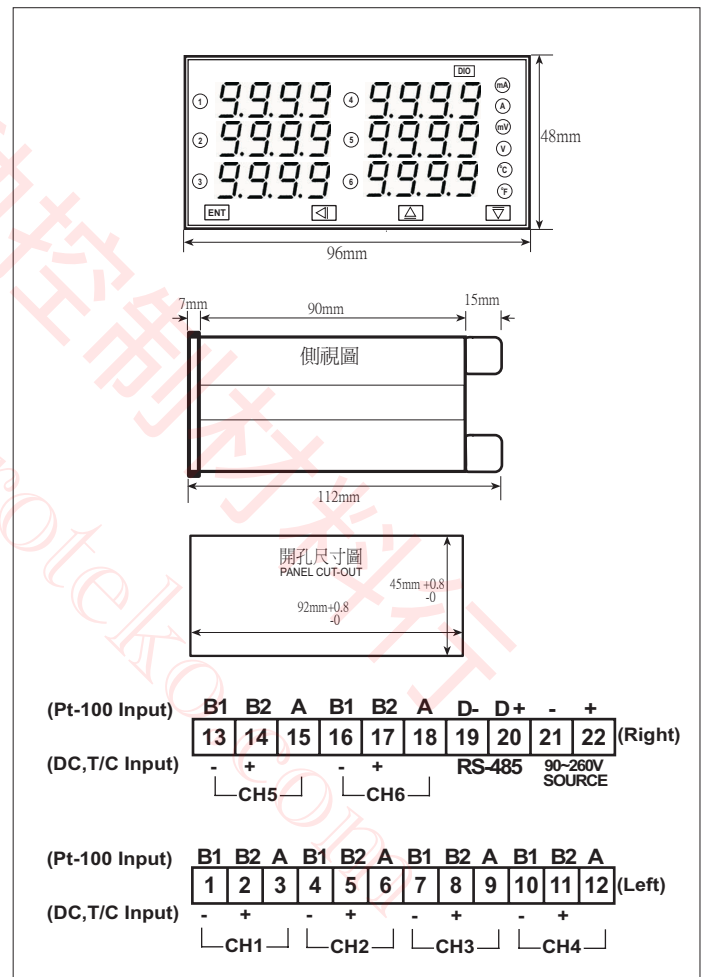
1.MODEL:MM8A- (選購型號)

NO	Input Type (Input range)	NO	Input Type (Input range)	NO	RS-485	NO	Aux.Power
A	DCV:0~ ± 500 mV/ ± 1 V/ ± 2 V/ ± 5 V/ ± 10 V	D	DCV:0~ ± 25 mV/ ± 50 mV/ ± 100 mV/ ± 500 mV/ ± 1 V	N	None	A	AC/DC18~60V
B	DCA:0~ ± 20 mA(inclusion DC4~20mA)		Thermocouple:J(-200~760°C)/K(-200~1360°C)	Y	RS-485	B	AC/DC90~260V
C	Pt-100(DIN):(-200.0~+850.0°C)		T(-200~395°C)/E(-185~990°C)/R(0~1760°C)		• Modbus mode		• Less 3VA for AC/DC input
			S(0~1760°C)/B(200~1800°C)				

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S. ± 1 digit(mV,V,mA)
0.1% F.S. ± 1 digit(Pt-100)
0.2% F.S. $\pm 0.5^\circ\text{C}$ (CIC)(Thermocouple)
- Cold junction compensation (冷接點補償) : $\leq \pm 0.5^\circ\text{C}$ (0~70°C)
- Readout range (顯示值範圍) : -1999~9999 digit adjustable
- Over input indication (過載顯示) : " doFL " or "-doFL"
- Polarity display (極性顯示) : When input is negative " - " display
- Zero (offset) range (歸零調整範圍) : 0~ ± 999 digit adjustable(individuality channel)
- Span (scale) range (最大值調整範圍) : 0~ ± 999 digit adjustable(individuality channel)
- Sampling time (取樣時間) : 1 cycles/sec.(total)
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 38400/19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Display (顯示幕) : Red high efficiency LEDs high 7mm(0.28")
- Temp. coefficient (溫度係數) : 50ppm/°C (0~50°C)
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/power)
- Operating condition (使用環境條件) : 0~50°C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70°C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



集合式直流電力錶(Smart 485/Low Power)

(DC MULTI-POWER METER)(Smart 485/Low Power)

MODEL
MMX-D


■特點(FEATURES)

- 精確度0.05%滿刻度 ± 1 位數(Accuracy 0.05% F.S. ± 1 digit)
- 可同時量測與顯示/直流電壓/電流/瓦特(仟瓦)/瓦特小時(仟瓦小時))
(Measuring and display DCV/DCA/W(KW)/WH(KWH))
- 電壓輸入(DC0~99.99V/0~600.0V)自動變檔功能
(Auto range (DC0~99.99V/0~600.0V) for voltage input function)
- 顯示範圍0~9999(電流/瓦特/仟瓦),0至99999999(8位數瓦特小時)可任意規劃
(Programmable rate 0 to 9999 digit (DCA/W(KW)),0 to 99999999 digit (WH(KWH))
- 數位RS-485界面(Digit RS-485 interface function)(optional)

1.MODEL:MMX-D

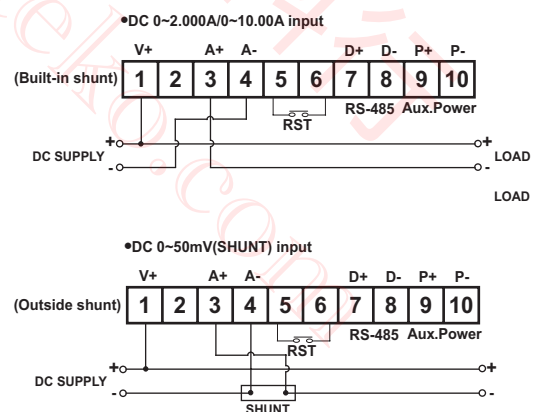
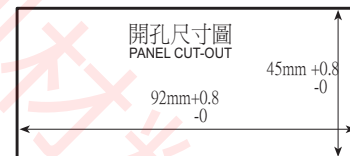
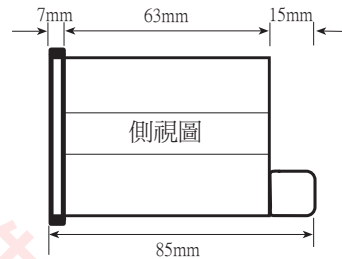
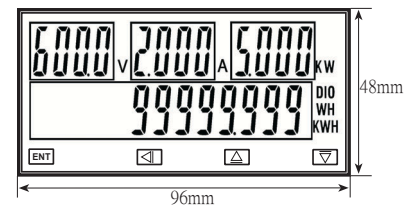
(選購型號)

NO	Input DCA	NO	RS-485	NO	Aux. Power
1	0~50mV(SHUNT)	N	None	A	DC8~60V
2	0~2.000A	Y	RS-485(Non-Isolating)	B	AC90~240V(50/60Hz)
3	0~10.00A	I	RS-485(Isolating)		• Less 0.5VA for DC8~60V
9	SPECIFIED	•Y (32 nodes on bus)•I (256 nodes on bus)			• Less 1.5VA for AC90~240V

2.SPECIFICATION (主要規格)

- Aux. power consumption : <0.35VA(DC12V/DC24V)
(輔助電源消耗功率) <0.5VA(DC48V)
<1.5VA(AC90~240V(50/60Hz))
- Measuring accuracy (精確度) (23 $\pm 5^{\circ}$ C) : 0.05% F.S. ± 1 digit
- Measurement range (輸入範圍) : Auto range (DC0~99.99V/0~600.0V(DC voltage))
- Input impedance (輸入阻抗) : >5M ohm (DC voltage)
- Sampling time (取樣時間) : 10 cycles/second(total)
- Readout range (顯示值範圍) : 0~9999 digit (DCA/W(KW))
0~9999999.99 digit (WH(KWH))
- Over input indication (過載顯示) : " doFL "
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- RS-485 protocol (通信協議) : Modbus RTU mode
- Temp. coefficient (溫度係數) : 50ppm/ $^{\circ}$ C (0~50 $^{\circ}$ C)
- Display (顯示幕) : Bight Red LEDs high 10.16mm(0.4")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output)(RS-485(Isolating))
1600Vdc (input/output)(RS-485(Isolating))
- Operating condition (使用環境條件) : 0~50 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70 $^{\circ}$ C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)



微電腦型RS-485顯示電錶(24X48mm/48x96mm) (MICROPROCESS RS-485 DISPLAY METER)(24X48mm/48x96mm)

**MODEL
MMX-RS**


■特點(FEATURES)

- 5位數RS-485顯示電錶(5 digit RS-485 display meter)
- 顯示範圍-19999~99999位數(Readout range form -19999 to 99999 digit)
- 通訊協議Modbus RTU模式(Modbus RTU mode for RS-485 protocol)
- 寬範圍交直流兩用電源設計(Wide input range for auxiliary power)
- 尺寸小,穩定性高(Dimension small and High stability)

1.MODEL:MMX-RS-☐☐☐ (選購型號)

NO	Display	NO	Case Size	NO	Aux. Power
1	One-display	1	24x48mm	A	AC/DC18~60V
2	Two-display	2	48x96mm	B	AC/DC90~260V
• Two-display only 48X96mm			• Less 3VA for AC/DC input		

2.SPECIFICATION (主要規格)

- Readout range (顯示範圍) : -19999~99999 digit
- RS-485 baud rate (傳輸速率) : 19200/9600/4800/2400 selective
- RS-485 address (通訊位址) : "01"~"FF"(0~255)
- RS-485 protocol (通訊協議) : Modbus RTU mode
- Display (顯示幕) : Red high efficiency LEDs high 10.16 mm (0.4")(MMX-RS-11X)
Red high efficiency LEDs high 20.32 mm (0.8")(MMX-RS-12X)
Red high efficiency LEDs high 10.16 mm (0.4")x2(MMX-RS-22X)
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶方式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/power)
- Operating condition (使用環境條件) : 0~50°C (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0~70°C (20 to 90% RH non-condensed)
- CE EMC Certification (CE認證) : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM (外型尺寸與開孔尺寸與配線圖)

