

3 1/2位數盤面型數位電錶(24X48mm)

(3 1/2 DIGITAL PANEL METER)(24X48mm)

MODEL
MMS-L



■特點(FEATURES)

- 精確度0.1%滿刻度±1位數(Accuracy 0.1% 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0~1999可任意規劃(Programmable rate 0 to 1999 digit)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小,穩定性高(Dimension small and High stability)

1.MODEL:MMS-L

(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	0~19.99uA	31	0~10%	41	DC4~20mA	51	-50.0~+50.0°C	61	2mV/V	A	DC5V(Non-isolating)
B	AC(RMS)	12	0~5V	22	0~199.9uA	32	0~50%	42	DC1~5V	52	-100.0~+100.0°C	62	3mV/V	B	DC5V(Isolating)
D	Potentiometer	13	0~10V	23	0~1.999mA	33	0~100%	49	SPECIFIED	53	-199.9~+199.9°C	69	SPECIFIED	C	DC10~30V(Non-isolating)
E	Transmitter	14	0~36V	24	0~19.99mA	34	5~95%			59	SPECIFIED			D	DC10~30V(Isolating)
F	Pt-100(RTD)	15	0~54V	25	0~199.9mA	39	SPECIFIED								
H	Load Cell	16	0~110V	26	0~1.999A										
R	Resistor	17	0~600V	27	0~5.00A										
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED										

•Three wire connection
 •Exciting voltage DC2.5V(<10mA)

•Exciting DC5V(<25mA)

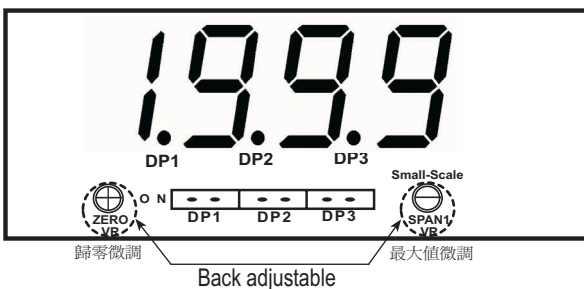
•Less±10%for input
 •Less 1VA for input

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.1% F.S.±1 digit
(精確度) (23±5°C) 0.2% F.S.±1 digit(AC)
- Sampling time : 2.5 cycles/sec.
(取樣時間)
- Readout range : 0~±1999 digit adjustable
(顯示值範圍)
- Zero (offset) range : 0~±100 digit adjustable
(歸零調整範圍)
- Over input indication : " 1 " or "-1"
(過載顯示)
- Display : Red high efficiency LEDs high 10.16mm(0.4")
(顯示幕)
- Polarity display : When input is negative "-" display
(極性顯示)
- Temp. coefficient : 50ppm/°C (0~50°C)
(溫度係數)
- Dielectric strength : 1KVac/1 min. (input/power)
(絕緣耐壓能力)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
(存放環境條件)
- Outside dimension : 24x48x48.5mm
(外型尺寸)
- 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

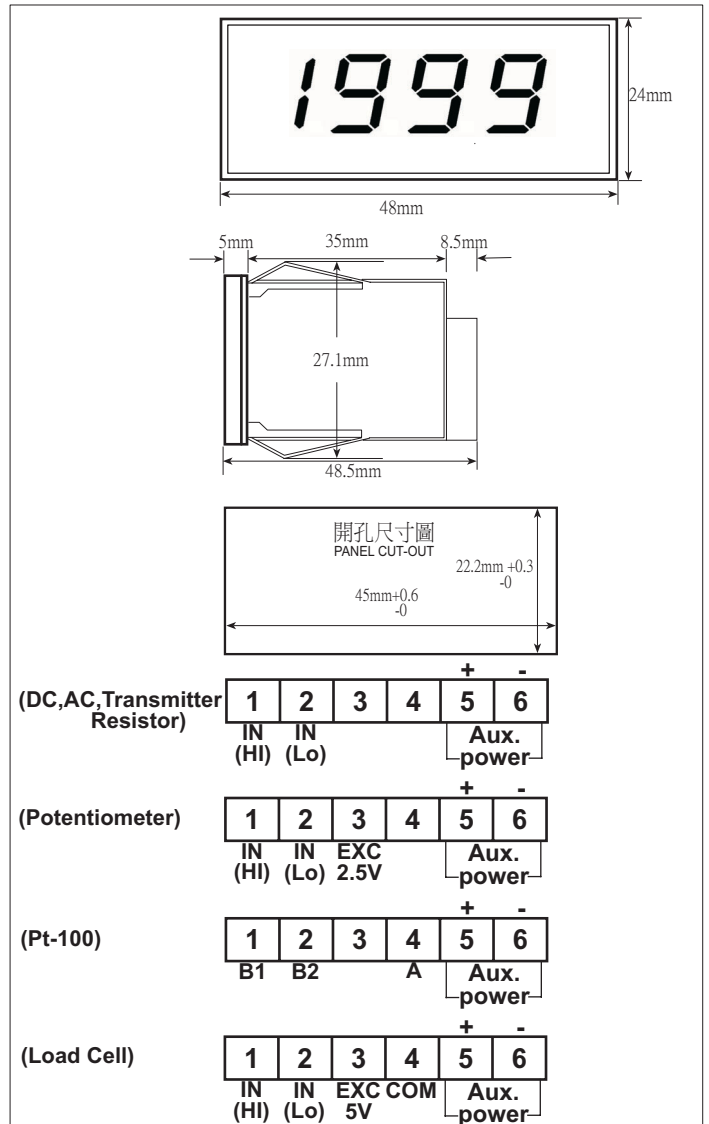
3.Program of span and zero and decimal point set

(顯示值之小數點設定與歸零值與最大值校正位置圖)



4.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電錶(Low Power)(24X48mm)

(5 DIGIT MICROPROCESS PANEL METER,(Low Power)24x48mm)

MODEL
MMS-H



■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/Pt-100/熱電偶/荷重元/電阻 等信號 (Measuring DCA/DCV/ACA/ACV/Potentiometer/Pt-100/Thermocouple/Load Cell/Resistor/etc.....)
- 熱電偶SENSOR輸入種類J/K/T/E/R/S/B可任意規劃(Input type J/K/T/E/R/S/B can be modified)
- 顯示範圍-19999~99999可任意規劃(Programmable rate -19999 to 99999 digit)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小,穩定性高(Dimension small and High stability)
- CE認證(CE EMC certification)

1.MODEL:MMS-H

(選購型號)

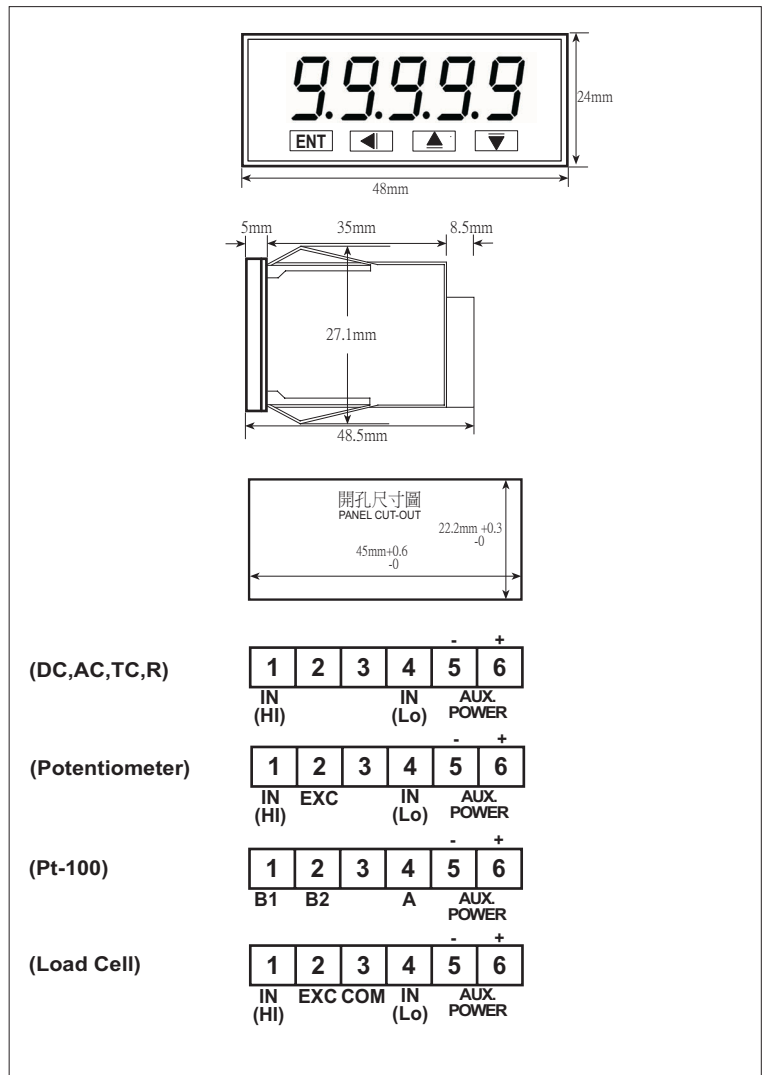
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Pt-100	NO	Load Cell	NO	Thermocouple	NO	Aux.Power	
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	51	-50.00~+50.00°C	61	2mV/V	71	J(-200~760°C)	A	DC5~30V (Non-Isolating)	
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	52	-100.00~+100.00°C	62	3mV/V	72	K(-200~1360°C)	B	DC5~30V (Isolating)	
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	53	-200.0~+400.0°C	69	SPECIFIED	73	T(-200~395°C)	C	AC/DC20~260V (50/60Hz)(Isolating)	
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	54	-200.0~+850.0°C	61/62	Exciting DC3.3V(<15mA)	74	E(-185~990°C)			
F	Pt-100(RTD)	15	0~54V	25	0~199.99mA	35	10~90%	59	SPECIFIED			75	R(0~1760°C)			
G	Thermocouple	16	0~110V	26	0~2.000A	39	SPECIFIED		*Three wire connection			76	S(0~1750°C)			
H	Load Cell	17	0~600V	27	0~5.000A		*Three wire connection					77	B(200~1800°C)		*LESS 0.45VA for Input	
R	Resistor	19	SPECIFIED	29	SPECIFIED		*Exciting voltage DC3.3V(<15mA)									*CJC traceability±±0.5°C(0~70°C)

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S.±1 digit (23±5°C) 0.2% F.S.±1 digit(AC(RMS)) 0.2% F.S.±0.5°C (CIC)(Thermocouple)
- Sampling time (取樣時間) : 2.5 cycles/sec.
- Display average times (顯示值平均次數) : 1~99 times adjustable
- Readout range (顯示值範圍) : -19999~99999 digit adjustable
- Zero (offset) range (歸零調整範圍) : -999~999 digit adjustable
- Span (scale) range (最大值調整範圍) : -999~999 digit adjustable
- Over input indication (過載顯示) : " doFL " or "-doFL"
- Polarity display (極性顯示) : When input is negative " - " display
- Display (顯示幕) : Bright Red LEDs high 8.6mm(0.388")
- 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) : 1.5KVac/1 min. (input/power)(Isolating)
- 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)
- Outside dimension (外型尺寸) : 24x48x48.5mm
- Case material (外殼材料) : ABS
- 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電錶(24X48mm)

(5 DIGIT MICROPROCESS PANEL METER,24x48mm)

MODEL
MMS



■特點(FEATURES)

- 精確度0.05%滿刻度±1位數(Accuracy 0.05% F.S.±1digit)
- 可量測交流直流電流/交直流電壓/電位計/傳送器/Pt-100/熱電偶/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Thermocouple/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或雙顯示功能(Auto zero or hold or dual display function)(optional)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小,穩定性高(Dimension small and High stability)

1.MODEL:MMS-□□□ (選購型號)

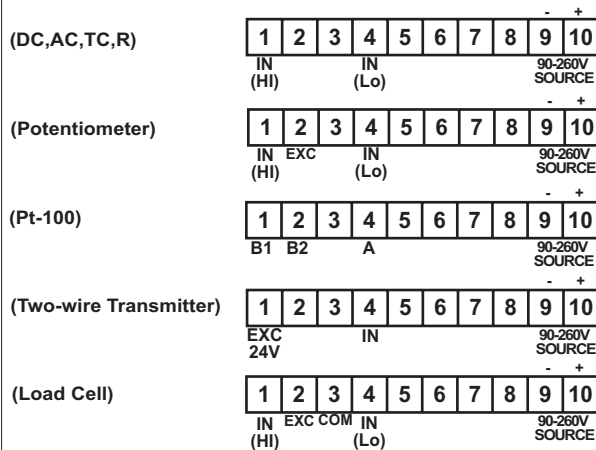
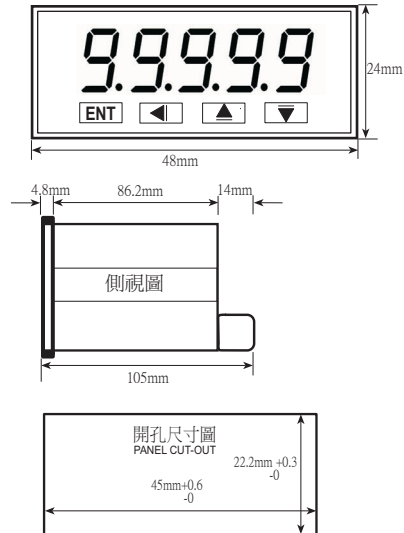
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	Thermocouple	NO	Aux.Power	
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	51	-50.00~+50.00°C	61	2mV/V	71	J(-200~760°C)	A	AC/DC18~260V	
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	52	-100.00~+100.00°C	62	3mV/V	72	K(-200~1360°C)	B	AC/DC90~260V	
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	53	-200.0~+400.0°C	63	2mV/V	73	T(-200~395°C)		• LESS 3VA for AC/DC input	
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	54	-200.0~+850.0°C	64	3mV/V	74	E(-185~990°C)			
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	59	SPECIFIED	69	SPECIFIED	75	R(0~1760°C)			
F	Pt-100(RTD)	16	0~110V	26	0~2.000A	39	SPECIFIED	•41/42 nonexciting DC24V	•Three wire connection non-programmable	•61/62 Exciting DC5V(<50mA)	•63/64 Exciting DC10V(<50mA)	76	S(0~1750°C)					
G	Thermocouple	17	0~600V	27	0~5.000A		•Three wire connection	•43/44 exciting DC24V (<25mA)				77	B(200~1800°C)					
H	Load Cell	18	0~1000V	28	0~7.500A		•Exciting voltage DC2.5V(<10mA)											
R	Resistor	19	SPECIFIED	29	SPECIFIED													

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.05% F.S.±1 digit (23±5°C) 0.2% F.S.±1 digit(AC(RMS)) 0.2% F.S.±0.5°C (CIC)(Thermocouple)
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : -19999 ~ 99999 digit adjustable
- Zero (offset) range (歸零調整範圍) : -19999 ~ 99999 digit adjustable
- Over input indication (過載顯示) : " doFL " or "-doFL"
- Display (顯示幕) : Red high efficiency LEDs high 10.16mm(0.4")
- Polarity display (極性顯示) : When input is negative " - " display
- 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) : 1.5KVac/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)



3 1/2位數可程式盤面型數位電錶(顯示幕0.56"/0.8")

(3 1/2 DIGITAL PANEL METER OF PROGRAMMABLE)(DISPLAY 0.56"/0.8")

MODEL
M1



■特點(FEATURES)

- 精確度0.1%滿刻度±1位數(Accuracy 0.1% F.S.±1digit)
- 可量測交直流電流/交直流電壓/電位計/傳感器/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0~1999可任意規劃(Programmable rate 0 to 1999 digit)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小、穩定性高(Dimension small and High stability)

1.MODEL:M1-

(選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	DISPLAY
A	DC	11	0~50mV	21	0~19.99uA	31	0~10%	41	DC4~20mA	51	-50.0~+50.0°C	61	2mV/V	A	0.56"(14.22mm)
B	AC(RMS)	12	0~5V	22	0~199.9uA	32	0~50%	42	DC1~5V	52	-100.0~+100.0°C	62	3mV/V	B	0.8"(20.32mm)
C	AC(TRMS)	13	0~10V	23	0~1.999mA	33	0~100%	43	DC4~20mA	53	-199.9~+199.9°C	63	2mV/V		
D	Potentiometer	14	0~36V	24	0~19.99mA	34	5~95%	44	DC1~5V	54	0~+850°C	64	3mV/V		
E	Transmitter	15	0~54V	25	0~199.9mA	35	10~90%	49	SPECIFIED	55	-200~+850°C	69	SPECIFIED		
F	Pt-100(RTD)	16	0~110V	26	0~1.999A	39				59	SPECIFIED				
H	Load Cell	17	0~600V	27	0~5.00A										
R	Resistor	18	0~1000V	28	0~10.00A										
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED										

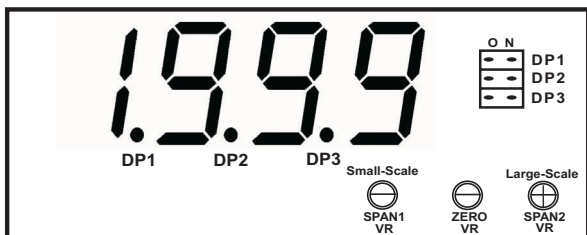
*41/42 nonexciting DC20V
 *43/44 exciting DC20V(<25mA)
 *Three wire connection
 *Exciting voltage DC2.5V(<10mA)
 *Three wire connection
 *non-programmable
 *61/62 Exciting DC5V(<100mA)
 *63/64 Exciting DC10V(<50mA)

2.SPECIFICATION (主要規格)

- Aux.power supply : AC110V & 220V±20%(50/60Hz)
(輔助電源)
- Measuring accuracy : 0.1% F.S.±1 digit
(精確度) (23±5°C) 0.2% F.S.±1 digit(AC(RMS))
- Sampling time : 2.5 cycles/sec.
(取樣時間)
- Readout range : 0~±1999 digit adjustable
(顯示值範圍)
- Zero (offset) range : 0~±100 digit adjustable
(歸零調整範圍)
- Over input indication : " 1 " or " -1 "
(過載顯示)
- Display : Red high efficiency LEDs high
(顯示幕) 14.22mm(0.56")M1-□□□A
Red high efficiency LEDs high
20.32mm(0.8")M1-□□□B
- Temp. coefficient : 50ppm/°C (0~50°C)
(溫度係數)
- Dielectric strength : 2KVac/1 min. (input/power)
(絕緣耐壓能力)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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

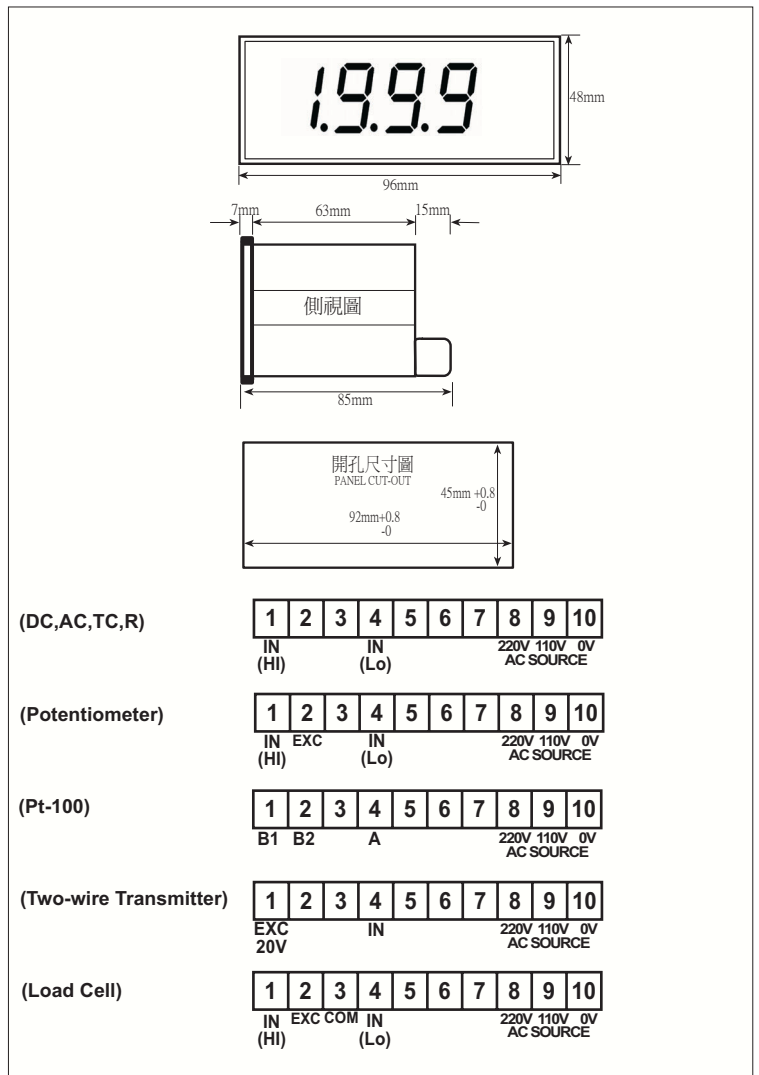
3.Program of span and zero and decimal point set

(顯示值之小數點設定與歸零值與最大值校正位置圖)



4.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



4 1/2位數可程式盤面型數位電錶(顯示幕0.56"/0.8") (4 1/2 DIGITAL PANEL METER OF PROGRAMMABLE)(DISPLAY 0.56"/0.8")

MODEL
M2



■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0~19999可任意規劃(Programmable rate 0 to 19999 digit)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小、穩定性高(Dimension small and High stability)

1. MODEL: M2-

(選購型號)

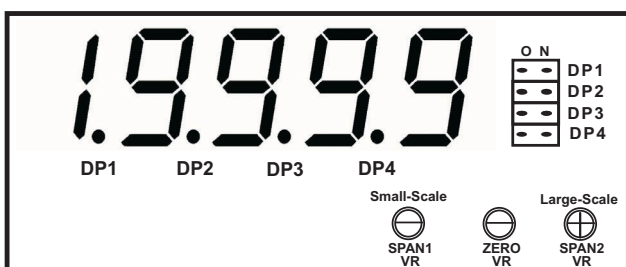
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	DISPLAY
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	51	-50.00~+50.00°C	61	2mV/V	A	0.56"(14.22mm)
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	52	-100.00~+100.00°C	62	3mV/V	B	0.8"(20.32mm)
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	53	-200.0~+400.0°C	63	2mV/V	•M2- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B programmable rate 0~9999 digit	
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	54	-200.0~+850.0°C	64	3mV/V		
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	59	SPECIFIED	69	SPECIFIED		
F	Pt-100(RTD)	16	0~110V	26	0~2.000A	39	SPECIFIED	•41/42 nonexciting DC20V	•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 DC20V(<25mA)	•non-programmable	•63/64 Exciting DC10V(<50mA)					
R	Resistor	18	0~1000V	28	0~10.000A										
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED										

2. SPECIFICATION (主要規格)

- Aux. power supply : AC110V & 220V±20%(50/60Hz)
(輔助電源)
- Measuring accuracy : 0.05% F.S.±1 digit
(精確度) (23±5°C) 0.2% F.S.±1 digit(AC(RMS))
- Sampling time : 2 cycles/sec.
(取樣時間)
- Zero (offset) range : 0~±100 digit adjustable
(歸零調整範圍)
- Over input indication : "0000" flash
(過載顯示)
- Display : Red high efficiency LEDs high
14.22mm(0.56")M2- A
Red high efficiency LEDs high
20.32mm(0.8")M2- B
- Polarity display : When input is negative "-" display
(極性顯示)
- Temp. coefficient : 50ppm/°C (0~50°C)
(溫度係數)
- Dielectric strength : 2KVac/1 min. (input/power)
(絕緣耐壓能力)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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. Program of span and zero and decimal point set

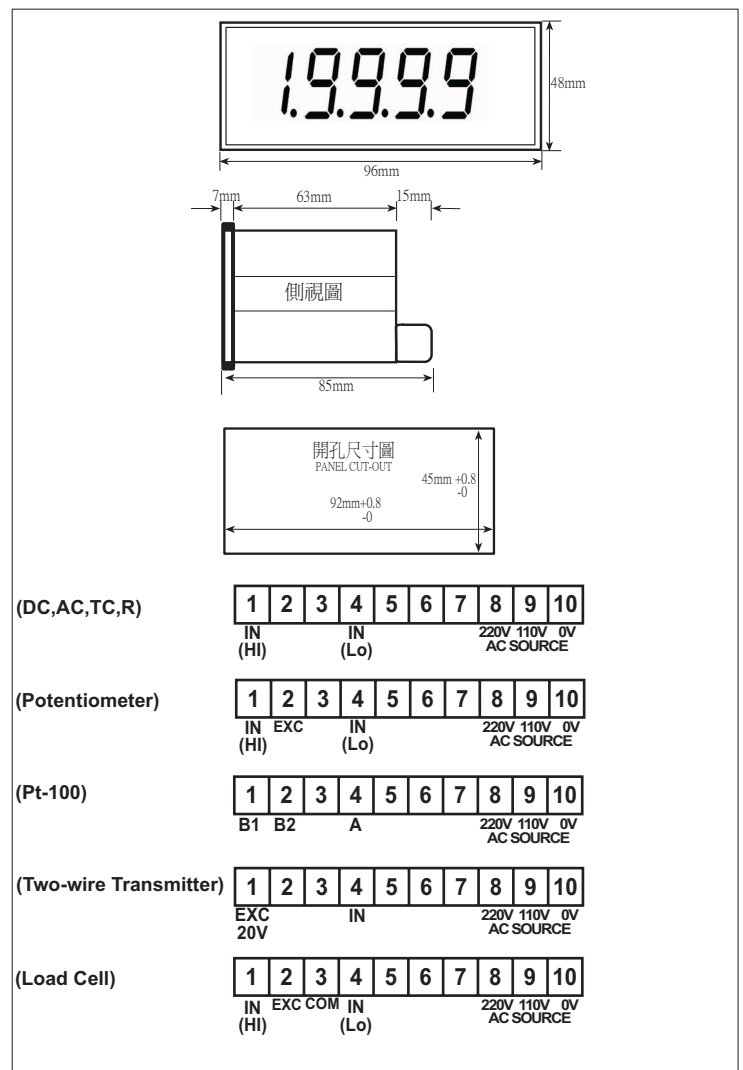
(顯示值之小數點設定與歸零值與最大值校正位置圖)



最大值微調 歸零微調 最大值粗調

4. 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電錶(顯示幕0.8")

(5 DIGIT MICROPROCESS PANEL METER)(DISPLAY 0.8")

**MODEL
MMX-1**



■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/熱電偶/荷重元/電阻 等信號
(Measuring DCA/DCV/ACA/ACV/Potentiometer/Transmitter/Pt-100/Thermocouple/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或開根號或雙顯示功能(Auto zero or hold or root or dual display function)(optional)
- 小數點可任意規劃(Decimal point can be modified)
- 尺寸小,穩定性高(Dimension small and High stability)

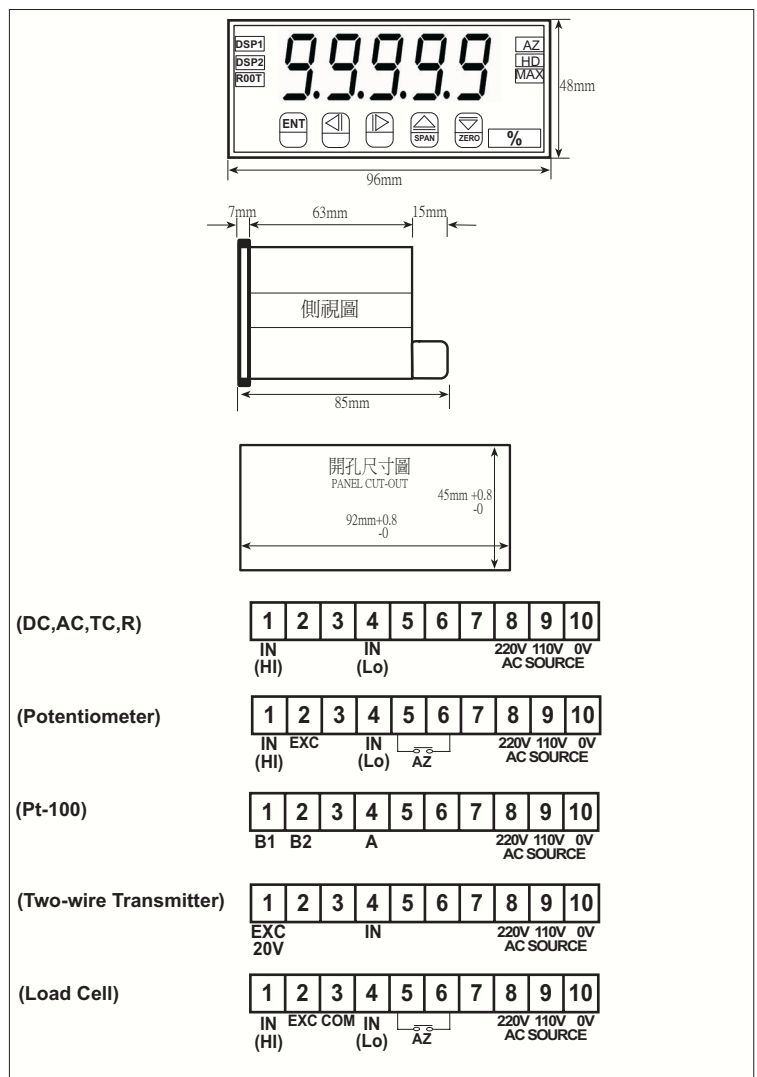
1.MODEL:MMX-1-□□□ (選購型號)

NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Pt-100	NO	Load Cell	NO	Thermocouple	NO	Aux.Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	51	-50.00~+50.00°C	61	2mV/V	71	J(-200~760°C)	A	AC110/220V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	52	-100.00~+100.00°C	62	3mV/V	72	K(-200~1360°C)	O	SPECIFIED
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	53	-200.0~+400.0°C	63	2mV/V	73	T(-200~395°C)		*±20% of rate less 3VA for AC input (50/60Hz)
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	44	DC1~5V	54	-200.0~+850.0°C	64	3mV/V	74	E(-185~990°C)		
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	49	SPECIFIED	59	SPECIFIED	69	SPECIFIED	75	R(0~1760°C)		
F	Pt-100(RTD)	16	0~110V	26	0~2.000A	39	SPECIFIED							76	S(0~1750°C)		
G	Thermocouple	17	0~600V	27	0~5.000A				*41/42 nonexciting DC20V		*Three wire connection non-programmable		*61/62 Exciting DC5V(<100mA) *63/64 Exciting DC10V(<50mA)	77	B(200~1800°C)		
H	Load Cell	18	0~1000V	28	0~10.000A				*43/44 exciting DC20V (<25mA)								
R	Resistor	19	SPECIFIED	29	SPECIFIED										*CJC traceability <±0.5°C(0~70°C)		

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) (23±5°C) : 0.05% F.S.±1 digit
0.2% F.S.±1 digit(AC(RMS))
0.2% F.S.±0.5°C (CJC)
- Sampling time (取樣時間) : 16 cycles/sec.
- Readout range (顯示值範圍) : -19999~99999 digit adjustable
- Zero (offset) range (歸零調整範圍) : -19999~99999 digit adjustable
- Over input indication (過載顯示) : " doFL " or "-doFL"
- Display (顯示幕) : Red high efficiency LEDs high
20.32mm(0.8")
- Polarity display (極性顯示) : When input is negative "-" display
- 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)



微電腦型交流電力控制電錶

(MICROPROCESS AC POWER CONTROLLER METER)

MODEL
MMP



■特點(FEATURES)

- 精確度0.25%滿刻度±1位數(Accuracy 0.25% F.S.±1 digit)
- 可量測交流瓦特/乏爾/功率因數/相角(Measuring watt/var/power factor/phase angel)
- 顯示範圍0~±19999可任意規劃(Programmable rate 0 to±19999 digit)
- 輸入與輸出絕緣耐壓2仟伏特/1分鐘(Dielectric strength 2KVac/1 min.(input/output/power))
- 突波測試強度4仟伏特(1.2x50us)(surage test 4KV(1.2x50us))
- 2組警報功能(Dual 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)

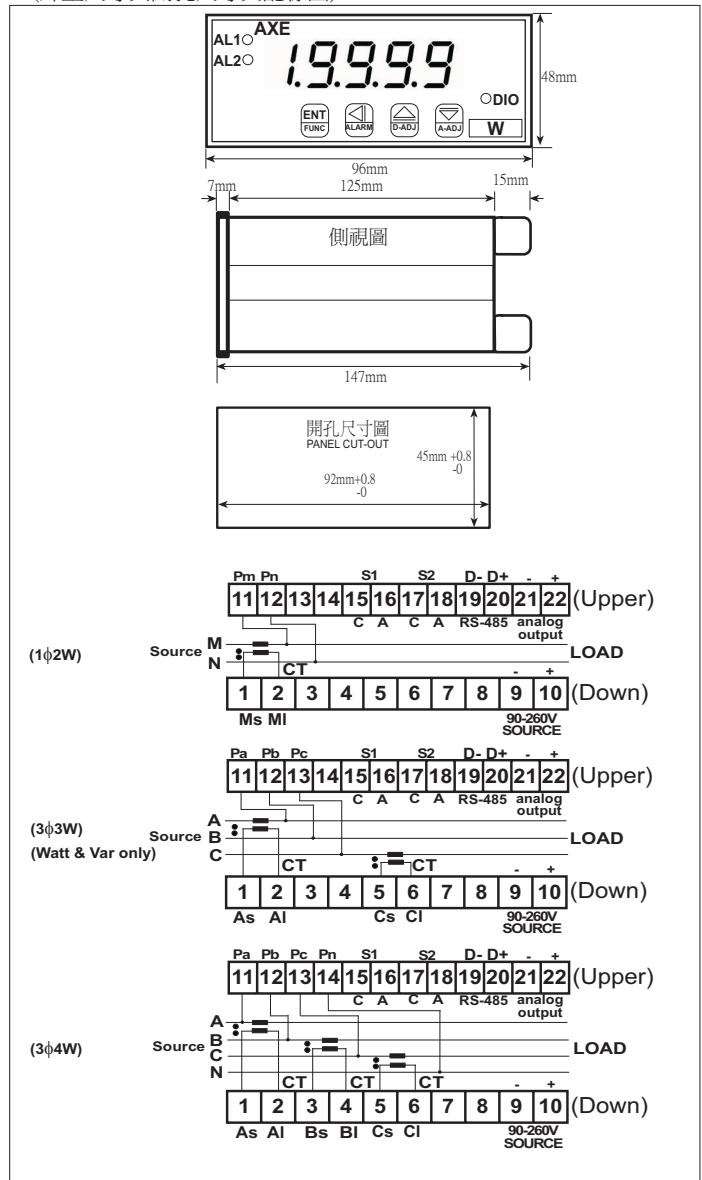
1.MODEL:MMP- [] [] - [] [] [] [] [] [] [] []
(選購型號)

NO	Input Type	NO	Input unit	NO	Input Voltage	NO	Input Current	NO	Input Frequency	NO	Alarm	NO	Analog	NO	RS-485	NO	Aux. Power
W	Watt	1	1φ2W	1	0~120V	1	0~1A	A	50Hz	0	None	N	None	N	None	A	AC/DC18~60V
V	Var	3	3φ3W	2	0~240V	2	0~5A	B	60Hz	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
F	Power Factor	4	3φ4W	3	0~400V	9	SPECIFIED	C	400Hz	2	Two	V	DC0~10V		•Modbus mode		•Less 4VA for AC/DC input
A	Phase Angel	9	SPECIFIED		•Voltage±30%				•Frequency±10%			R	SPECIFIED				

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.25% F.S.(Watt,Var,phase angle) (23±5°C) 0.25% F.S.±0.25°(Power Factor)
- Input burden (輸入負載) : <0.2VA (Voltage) <0.2VA (Current)
- Maximum input over (最大過載能力) : Current related input: 3 x rated continuous Voltage related input: maximum 2 x rated continuous
- Over input indication (過載顯示) : "doFL" or "-doFL"
- Readout range (顯示值範圍) : 0~±19999 digit adjustable(MMP-W/V/A) -0.300~-1.000~+1.000~+0.300cosθ(MMP-F)
- 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
- 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) : 100ppm/°C (0~50°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)
- Surge test (突波測試) : ANSI c37.90a/1974,DIN-IEC 255-4 impulse voltage 4KV(1.2x50us)
- 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)



微電腦型交流瓦特/瓦特小時/(乏爾/乏爾小時)控制電錶 (MICROPROCESS WATT/WATTHOUR(VAR/VARHOUR) CONTROLLER METER)

MODEL MPH



■特點(FEATURES)

- 精確度0.25%滿刻度±1位數(Accuracy 0.25%F.S.±1digit)
- 顯示範圍0至19999(瞬間量),0至999999999(九位數累積量)可任意規劃
(Programmable rate 0 to 19999 digit (rate), 0 to 999999999 digit (totalizer))
- 瞬間量之最高顯示值可任意規劃(0至19999)(Programmable rate 0 to 19999 digit)
- 累積量之積算比例可任意規劃(0.00001至9999.99999)
(Programmable scale factor (0.00001 to 9999.99999) (totalizer))
- 輸入與輸出絕緣耐壓2仟伏特/1分鐘(Dielectric strength 2KVac/1 min.(input/output/power))
- 突波測試強度4仟伏特(1.2x50us)(Surge test 4KV(1.2x50us))
- 二組警報功能(Dual alarm function) (Optional)
- 15 BIT 隔離類比輸出(15 bit DAC isolating analog output function) (Optional)
- 數位 RS-485 界面(Digit RS-485 interface function) (Optional)
- 數位脈波輸出(Digit pulse output function) (Optional)

1. MODEL: MPH- □ □ - □ □ □ - □ □ □ □ □ □
(選購型號)

NO	Input Type	NO	Input unit	NO	Input Voltage	NO	Input Current	NO	Input Frequency	NO	Alarm	NO	Analog	NO	RS-485	NO	Pulse	NO	Aux. Power
W	Watt	1	1φ2W	1	0~120V	1	0~1A	A	50Hz	0	None	N	None	N	None	N	None	A	AC/DC18~60V
	Watt hour	3	3φ3W	2	0~240V	2	0~5A	B	60Hz	1	One	I	DC4~20mA	Y	RS-485	Y	1 pulse/count	B	AC/DC90~260V
V	Var	4	3φ4W	3	0~400V	9	SPECIFIED	C	400Hz	2	Two	V	DC0~10V		•Modbus mode		•Standard open collector(Max. DC30V, <40mA)		•Less 5VA for AC/DC input
	Var hour	9	SPECIFIED	*Voltage±30%					*Frequency±10%	•Pulse output only one alarm		T	DC4~20mA	R	SPECIFIED				

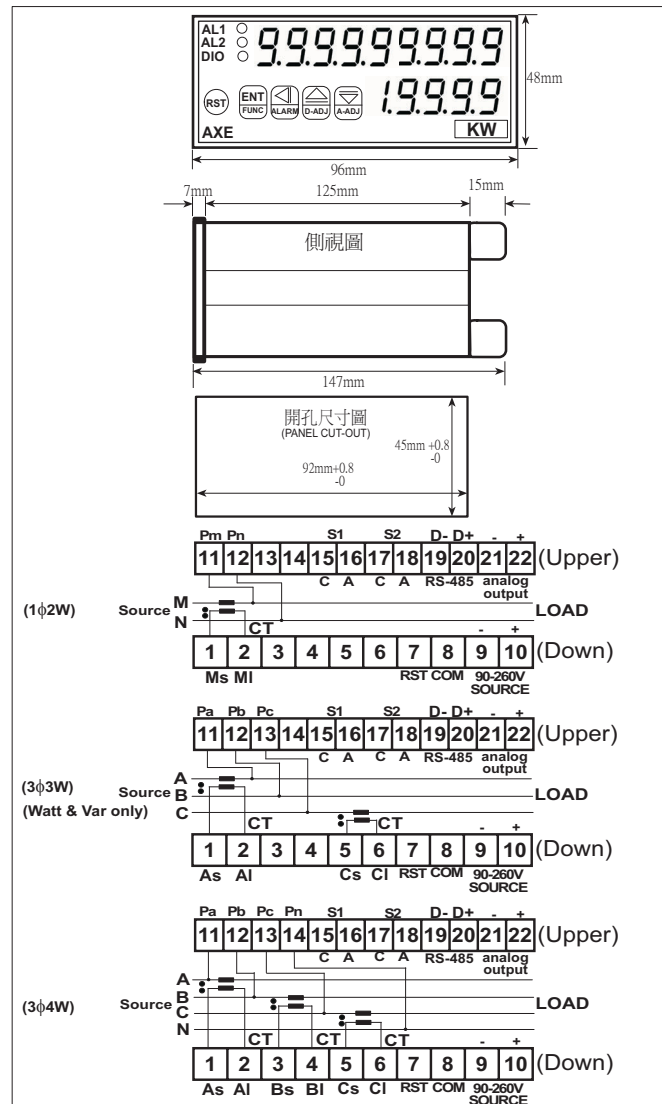
•Two-wire transmitter (Exciting voltage DC10~36V)

2. SPECIFICATION (主要規格)

- Measuring accuracy : 0.25% F.S.±1 digit (rate) (23±5°C) (精確度)
- Over input indication : " doFL " or "-doFL" (過載顯示)
- Readout (compare) range : 0~19999 adjustable(rate) (顯示值(比較值)範圍) 0~999999999 adjustable (totalizer)
- 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 (isolating) (類比輸出解析度)
- Response time : < 250ms (0~90%) (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 baud rate : 19200/9600/4800/2400 selective (傳輸速率)
- RS-485 address : "01"~"FF"(0~255) (通訊位址)
- RS-485 protocol : Modbus RTU mode (通訊協議)
- Temp. coefficient : 100ppm/°C (0~50°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 (記憶方式)
- Dielectric strength : 2KVac/1 min. (input/output/power) 1600 Vdc (input/output) (絕緣耐壓能力)
- Surge test : ANSI c37.90a/1974, DIN-IEC 255-4 (突波測試) impulse voltage 4KV(1.2x50us)
- Operating condition : 0~50°C (20 to 90% RH non-condensed) (使用環境條件)
- Storage condition : 0~70°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)



微電腦型單相交流集合式電錶(單相二線系統)

(MICROPROCESS AC MULTI-POWER METER)(1Φ2W)

MODEL
MMX-P1



■特點(FEATURES)

- 精確度0.25%滿刻度±1位數(Accuracy 0.25% F.S.±1 digit)(ACA/ACV/WATT/VA)
- 可同時量測與顯示交流電壓,電流,頻率,瓦特,(功率因數/視在功率)
(Measuring ACA/ACV/Frequency/WATT(power factor or Apparent power))
- 交流電壓,電流,瓦特皆為真正有效值(TRMS)(ACA/ACV/WATT for True RMS)
- 交流電流,瓦特之小數點可任意設定(ACA/WATT decimal point can be modified)
- 瓦特單位W或KW可任意設定(W or KW scale can be modified)
- CT比可任意設定(1至999)(CT rate can be modified(1 to 999))
- 輸入與輸出絕緣耐壓 2仟伏特/1分鐘(Dielectric strength 2KVac/1 min.(input/output/power))
- 突波測試強度4仟伏特(1.2x50us)(surage test 4KV(1.2x50us))
- 數位RS-485界面(Digit RS-485 interface function)(Optional)

1:MODEL:MMX-P1-□ □ □ □ 選購型號

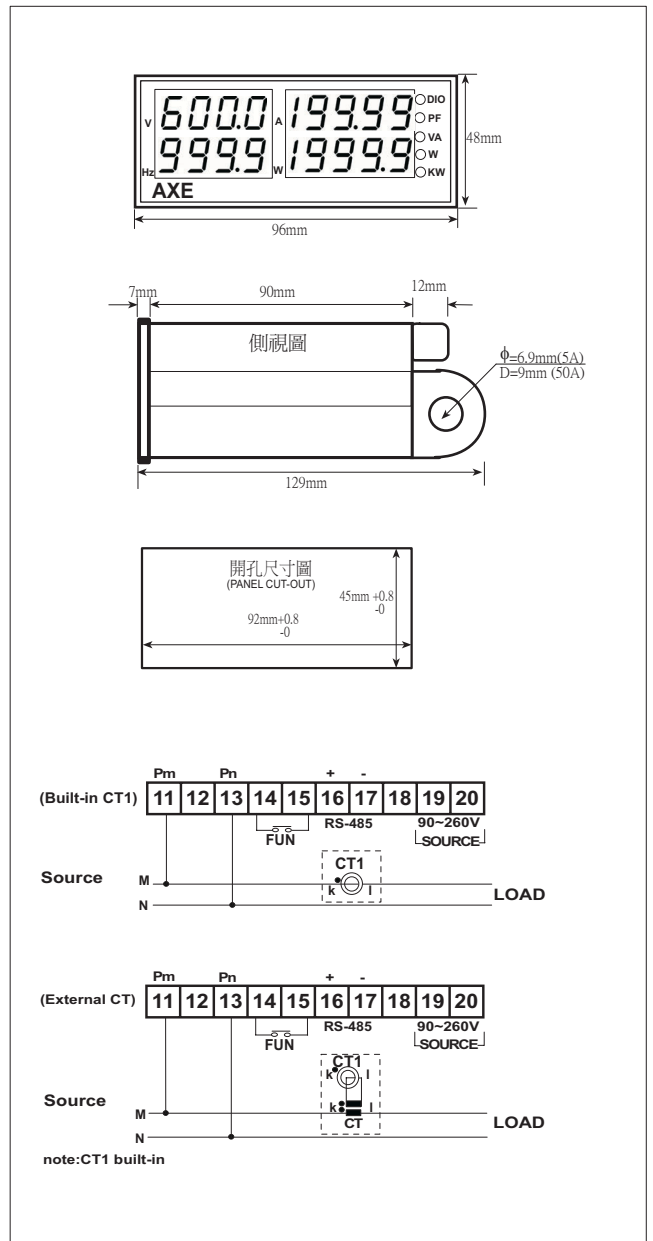
NO	Input Voltage	NO	Input Current	NO	RS-485	NO	Aux.Power
1	AC0~300.0V	2	AC0~5A	N	None	A	AC/DC18~60V
2	AC0~600.0V	3	AC0~50A	Y	RS-485	B	AC/DC90~260V
9	SPECIFIED	9	SPECIFIED				

•Modbus mode •Less 5VA for AC/DC input

2.SPECIFICATION(主要規格)

- Measuring accuracy (精確度) (23±5°C) : 0.1% F.S.±1 digit (Frequency)
0.25% F.S.±1 digit(ACA,ACV,Watt,VA)
0.25% F.S.±0.25%(Power Factor)
- Input burden (輸入負載) : <0.2VA (Voltage)
<0.2VA (Current)
- Maximum input over (最大過載能力) : Current related input: 3 x rated continuous
10 x rated 30 sec. 25 x rated 3sec.
50 x rated 1sec.
Voltage related input: maximum 2 x rated continuous
- Over input indication (過載顯示) : "doFL"
- Readout range (顯示值範圍) : 0~600.0V(Voltage)
0~999.9Hz(Frequency)(<20% for voltage input)
0~19999 digit adjustable(Current,Watt,VA)
-0.300~-1.000~+1.000~+0.300cosθ(PF)
- Sampling time (取樣時間) : 2 cycles/sec.
- 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) : 100ppm/°C (0~50°C)
- Display (顯示幕) : Red high efficiency LEDs high 10.16 mm(0.4")
- Parameter setting (參數設定方式) : Touch switches
- Memory mode (記憶型式) : Non-volatile E² PROM memory
- Insulation Resistance (絕緣阻抗) : >100Mohm with 500V DC
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output/power)
1600 Vdc (input/output)
- Surge test (突波測試) : ANSI c37.90a/1974,DIN-IEC 255-4
impulse voltage 4KV(1.2x50us)
- 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)



三相交流電壓/電流電錶 (3 PHASE AC VOLTAGE/CURRENT METER)

MODEL
MMP-3VI



■特點(FEATURES)

- 精確度0.15%滿刻度(Accuracy 0.15% F.S.)
- 可同時量測與顯示三相交流相電壓、線電壓、電流(Measuring ACV-line/ACV-phase/A)
- CT比與PT比可任意設定(1至9999)(CT rate/PT rate can be modified(1 to 9999))
- 手動與自動顯示模式可任意規劃(Manual or auto scanning mode can be modified)
- 突波測試強度4仟伏特(1.2x50us)(surage test 4KV(1.2x50us))
- 3組警報控制功能(Three alarm control function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(Optional)

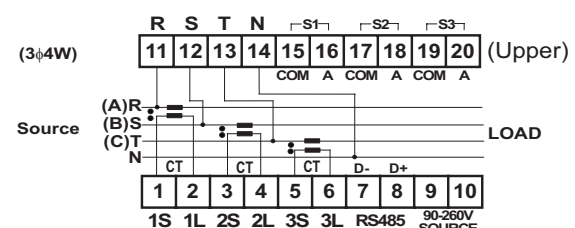
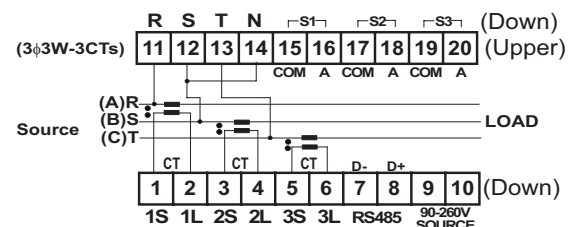
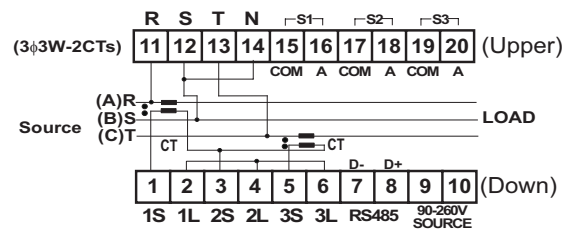
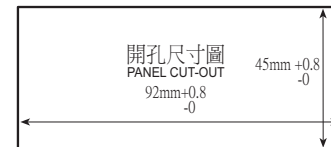
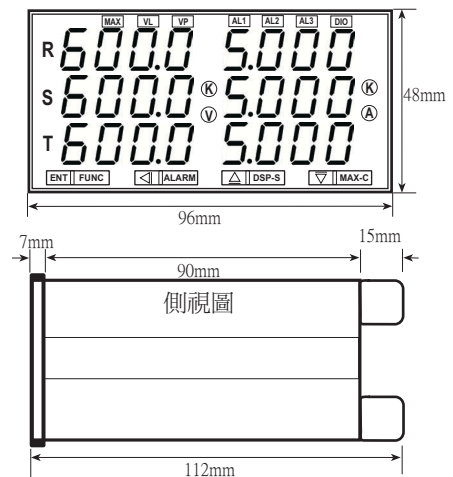
1.MODEL:MMP-3VI-□ □ □ (選購型號)

NO	Alarm Output	NO	RS-485	NO	Aux. Power
N	None	N	None	A	AC18~60V
R	Relay(Three)	Y	RS-485	B	AC90~260V
P	Pulse(Three)		•Modbus mode		•Less 4VA for AC/DC input

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.15% F.S.(23±5°C)
(精確度)
- Input burden : <0.15VA (Voltage/ Current)
(輸入負載)
- Maximum input over : Voltage related input: maximum AC 750V
(最大過載能力) Current related input: 3 x rated continuous
10 x rated 30 sec. 25 x rated 3 sec. 50 x rated 1 sec.
- Over input indication : "doFL"
(過載顯示)
- Measurement range : AC voltage(60~600V)(45~65Hz)
(輸入範圍) AC current(0.05~5A)(45~65Hz)
- Sampling time : 10 cycles/second(total)
(取樣時間)
- Scanning mode : Auto or manual can be selective
(掃描模式) (Auto:chang page/10 second)
- CT/PT rate : 1~9999 adjustable
(CT/PT 比值)
- Alarm delay time : 0~999 second adjustable
(繼電器延遲動作時間)
- Pulse output type : Standard open-collector
(脈波輸出形式) (Max.DC60V/120mA)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- RS-485 adress : "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 : 50ppm/°C (0~60°C)
(溫度係數)
- Display : Red high efficiency LEDs high 7.0mm(0.28")
(顯示幕)
- Parameter setting : Touch keys
(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)
- Surge test : ANSI c37.90a/1974,DIN-IEC 255-4
(突波測試) impulse voltage 4KV(1.2x50us)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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)



NOTE: If not voltage input short pin9 to pin11 and pin10 to pin14,

多功能集合式電力電錶(96x96mm)

(MULTI-FUNCTION POWER METER ,96x96mm)

**MODEL
MMP-2**



■特點(FEATURES)

- 精確度 $\pm 0.25\%$ 滿刻度(Accuracy $\pm 0.25\%$ F.S.)
- 可同時量測與顯示交流相電壓,線電壓,電流,實功率,虛功率,功率因素,頻率,任瓦小時,需量(Measuring and display ACV/ACA/Watt/Var/Power factor/Frequency/KWH/DM(Demand))
- 輸入配線系統可任意選擇(Input measurement network can be selective(1 ϕ 2W/1 ϕ 3W/3 ϕ 3W/3 ϕ 4W))
- CT比與PT比可任意設定(1至9999)(CT rate/PT rate can be modified(1 to 9999))
- 手動與自動顯示模式可任意規劃(Manual or auto scanning mode can be modified)
- 2組警報控制功能(Two alarm control function)(optional)
- 2組脈波輸出功能(Two pulse output function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(Optional)

1. MODEL: MMP-2-

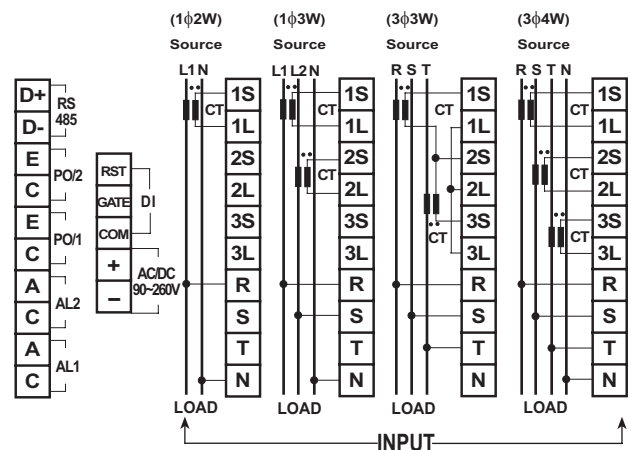
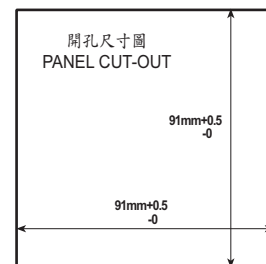
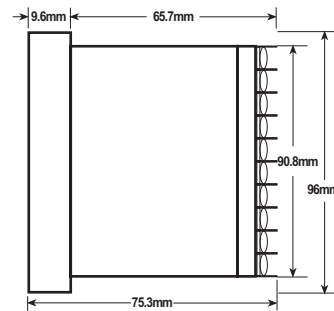
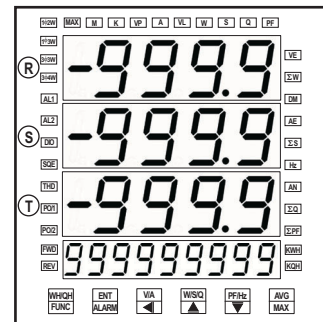
(選購型號)

NO	Alarm Output	NO	Pulse Output	NO	RS-485	NO	Aux. Power
N	None	N	None	N	None	A	AC/DC18~60V
R	Two-Relay	Y	Two-Pulse	Y	RS-485	B	AC/DC90~260V
P	Two-Pulse		•Pulse is open-collector		•Modbus mode		•Less 4VA for AC/DC input

2. SPECIFICATION (主要規格)

- Measuring accuracy : $\pm 0.25\%$ F.S.(V,A,W,Var,P.F./KWH)
(精確度)(23 $\pm 5^{\circ}$ C) $\pm 0.05\%$ F.S.(Frequency)
- Input burden : <0.15VA (Voltage/ Current)
(輸入負載)
- Maximum input over : Current related input: 3 x rated continuous
(最大過載能力) 10 x rated 30 sec. 25 x rated 3 sec. 50 x rated 1 sec.
Voltage related input:750V
- Over input indication : "doFL"
(過載顯示)
- Sampling time : 1 cycles/second(total)
(取樣時間)
- Measurement range : AC voltage (60~600V)
(輸入範圍) AC current (0.05~5A)
AC frequency(45.00~65.00Hz)
- Scanning mode : Auto or manual can be selective
(掃瞄模式) (Auto:chang page/10 second)
- Readout/compare range : -9999~+9999 digit (V,A,W,Var,HZ,PF)
(顯示與比較值範圍) 0~999999999+FWD/REV (KWH/KQH)
- CT/PT rate : 1~9999 adjustable
(CT/PT 比值)
- Alarm delay time : 0~999 second adjustable
(繼電器延遲動作時間)
- Pulse output type : Standard open-collector(Max.DC60V/120mA)
(脈波輸出形式)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Pulse output/KWH : 0.001/0.01/0.1/1/10/100/1000 selective
(脈波輸出數量KWH)
- RS-485 adress : "00"~"FF"(0~255)
(通訊位址)
- RS-485 baud rate : 38400/19200/9600/4800/2400 selective
(傳輸速度)
- RS-485 protocol : Modbus RTU mode
(通信協議)
- Temp. coefficient : 50ppm/ $^{\circ}$ C (0~60 $^{\circ}$ C)
(溫度係數)
- Display : Red high efficiency LEDs high 14.22mm(0.56")
(顯示幕) Red high efficiency LEDs high 10.16mm(0.4")(KWH)
- 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)
- Surge test : ANSI c37.90a/1974,DIN-IEC 255-4
(突波測試) impulse voltage 4KV(1.2x50us)
- 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)



多功能集合式電力電錶 (MULTI-FUNCTION POWER METER)

MODEL
MMP-3



■特點(FEATURES)

- 精確度 $\pm 0.25\%$ 滿刻度(Accuracy $\pm 0.25\%$ F.S.)
- 可同時量測交流相電壓,線電壓,電流,實功率,虛功率,功率因素,頻率,仟瓦小時(Measuring ACV/ACA/Watt/Var/Power factor/Frequency/KWH)
- 輸入配線系統可任意選擇(Input measurement network can be selective(1 ϕ 2W/1 ϕ 3W/3 ϕ 3W/3 ϕ 4W))
- CT比與PT比可任意設定(1至9999)(CT rate/PT rate can be modified(1 to 9999))
- 手動與自動顯示模式可任意規劃(Manual or auto scanning mode can be modified)
- 3組警報控制功能(Three alarm control function)(optional)
- 數位RS-485界面(Digit RS-485 interface function)(Optional)

1.MODEL:MMP-3-

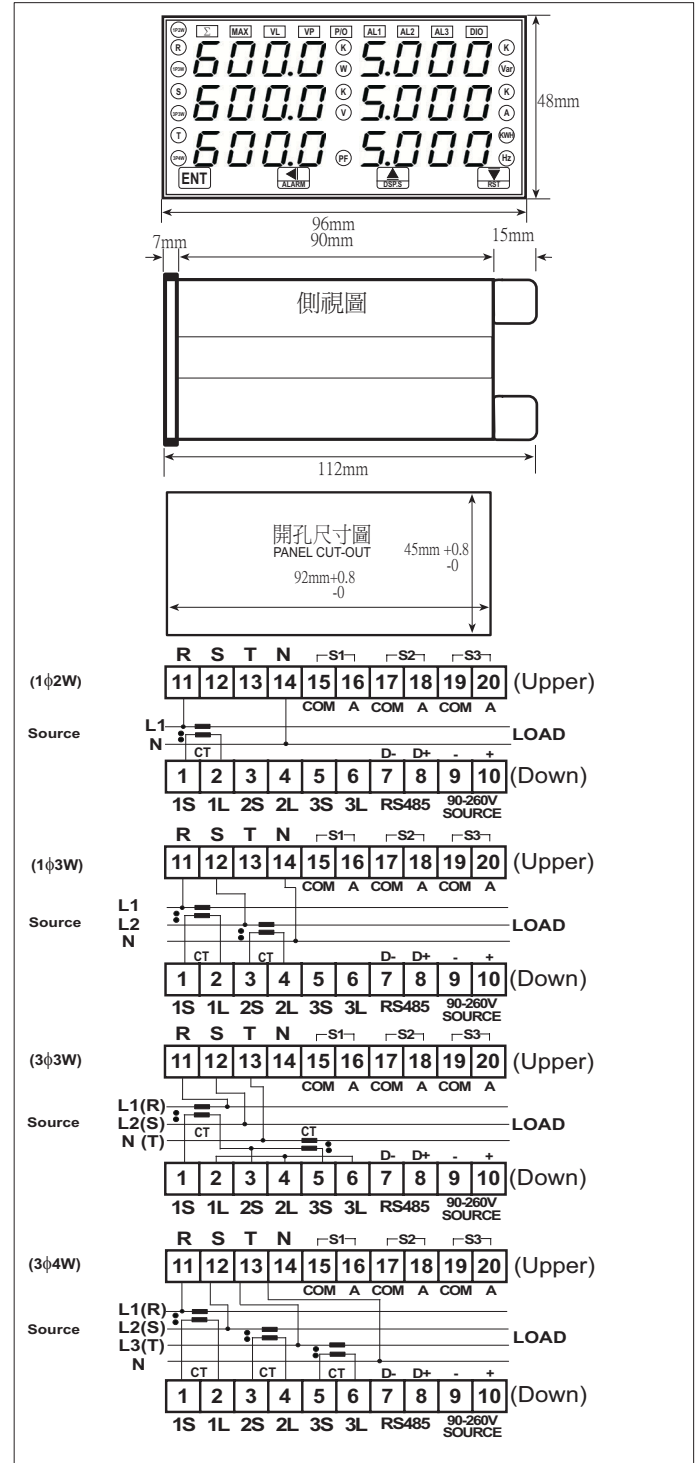
(選購型號)

NO	Alarm Output	NO	Alarm Output	NO	RS-485	NO	Aux. Power
N	None	S	Relay(Two)+ •Pulse(One)	N	None	A	AC/DC18~60V
R	Relay(Three)			Y	RS-485	B	AC/DC90~260V
P	Pulse(Three)		•When AL3.S=KWH		•Modbus mode		•Less 4VA for AC/DC input

2.SPECIFICATION (主要規格)

- Measuring accuracy (精確度) (23 \pm 5 $^{\circ}$ C) : $\pm 0.25\%$ F.S.(V,A,W,Var,P.F./KWH) $\pm 0.05\%$ F.S.(Frequency)
- Input burden (輸入負載) : <0.2VA (Voltage/ Current)
- Maximum input over (最大過載能力) : Current related input: 3 x rated continuous 10 x rated 30 sec. 25 x rated 3 sec. 50 x rated 1 sec. Voltage related input:750V
- Over input indication (過載顯示) : "doFL"
- Sampling time (取樣時間) : 1 cycles/second(total)
- Measurement range (輸入範圍) : AC voltage (60~600V) AC current (0.05~5A) AC frequency(45.00~65.00Hz)
- Scanning mode (掃描模式) : Auto or manual can be selective (Auto:chang page/5 second)
- CT/PT rate (CT/PT 比值) : 1~9999 adjustable
- Alarm delay time (繼電器延遲動作時間) : 0~999 second adjustable
- Pulse output type (脈波輸出形式) : Standard open-collector(Max.DC60V/120mA)
- Relay contact output (繼電器容量) : AC 250V-5A, DC 30V-7A
- Pulse output/KWH (脈波輸出數量KWH) : 0.001/0.01/0.1/1/10/100/1000 selective
- RS-485 adress (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
- Temp. coefficient (溫度係數) : 50ppm/ $^{\circ}$ C (0~60 $^{\circ}$ C)
- Display (顯示幕) : Red high efficiency LEDs high 7.0mm(0.28")
- 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)
- Surge test (突波測試) : ANSI c37.90a/1974,DIN-IEC 255-4 impulse voltage 4KV(1.2x50us)
- 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)



微電腦型盤面式控制電錶(24x48mm) (MICROPROCESS PANEL CONTROLLER METER)(24x48mm)

MODEL
MMX-AS



■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)

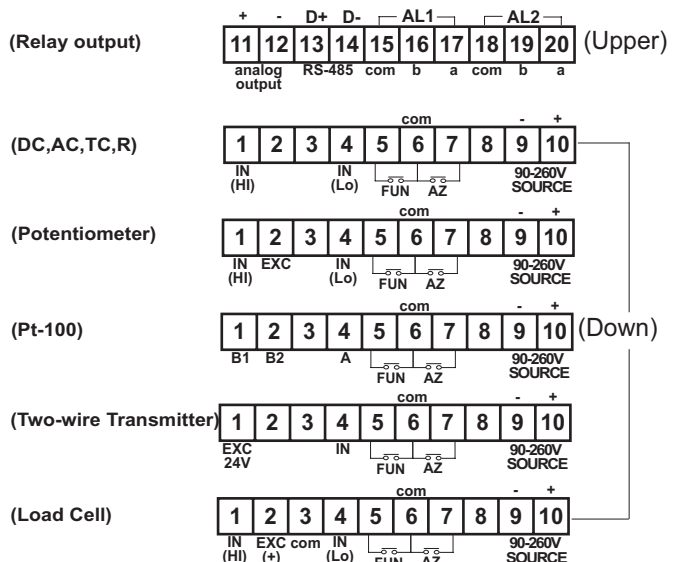
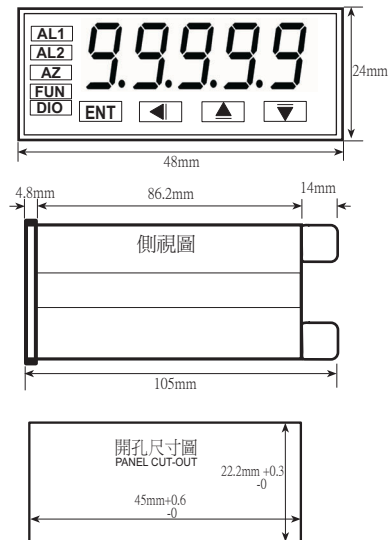
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Load Cell	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	61	2mV/V	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	62	3mV/V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	63	2mV/V	2	Two	2	DC0~10V				
D	Potentiometer	14	0~36V	24	0~19.999mA	34	5~95%	64	3mV/V			3	•DC4~20mA				
E	Transmitter	15	0~54V	25	0~199.99mA	35	10~90%	69	SPECIFIED			9	SPECIFIED				
F	Pt-100(RTD)	16	0~110V	26	0~1.9999A	39	SPECIFIED										
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±5°C) 0.2% F.S.±1 digit(AC(RMS)) 0.2% F.S.±0.5°C (C/C)(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/°C (0~50°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°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0.56") (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-rootextractor)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)

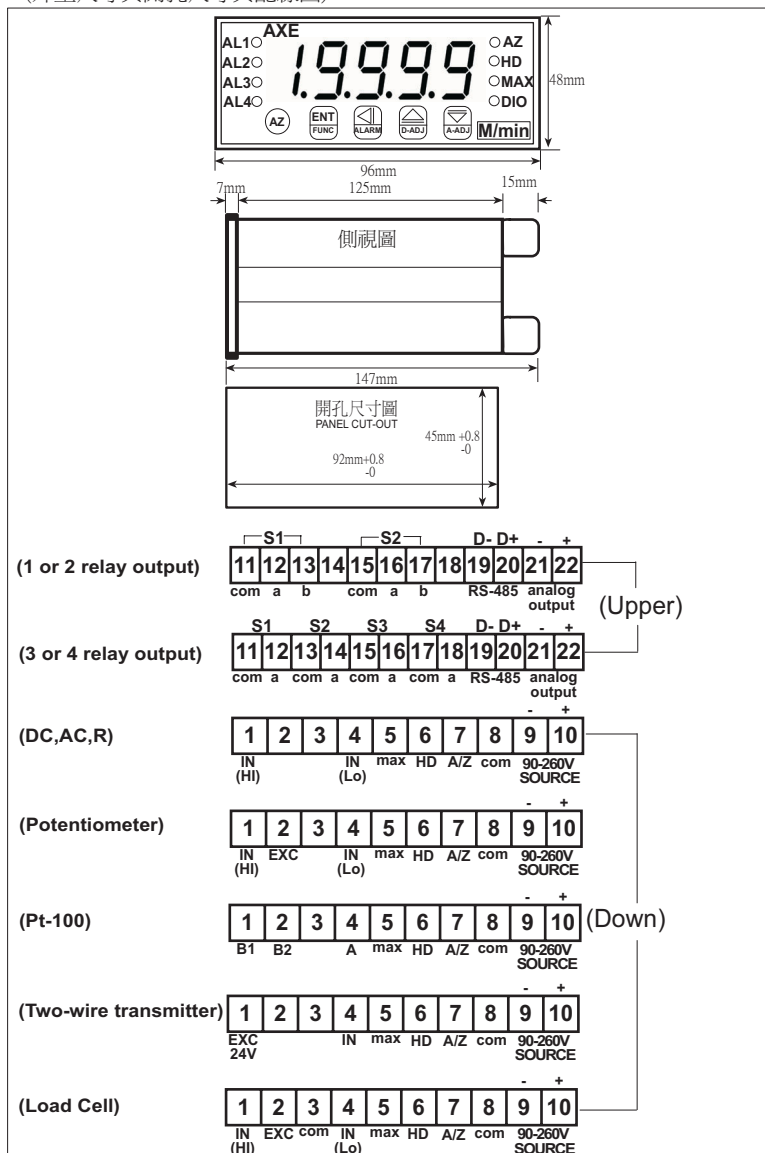
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V				
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 : 0.05% F.S.±1 digit (精確度) (23±5°C) 0.2% F.S.±1 digit(AC(RMS))
- Sampling time : 16 cycles/sec. (取樣時間)
- Readout range : 0~±19999digit 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 < 10V for current mode < [(V+)-7.5V]/20mA for two-wire mode (輸出負載能力)
- 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 : 50ppm/°C (0~50°C) (溫度係數)
- Display : Red high efficiency LEDs high (顯示幕) 14.22mm(0.56")
- 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°C (20 to 90% RH non-condensed) (使用環境條件)
- Storage condition : 0~70°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)



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.±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)

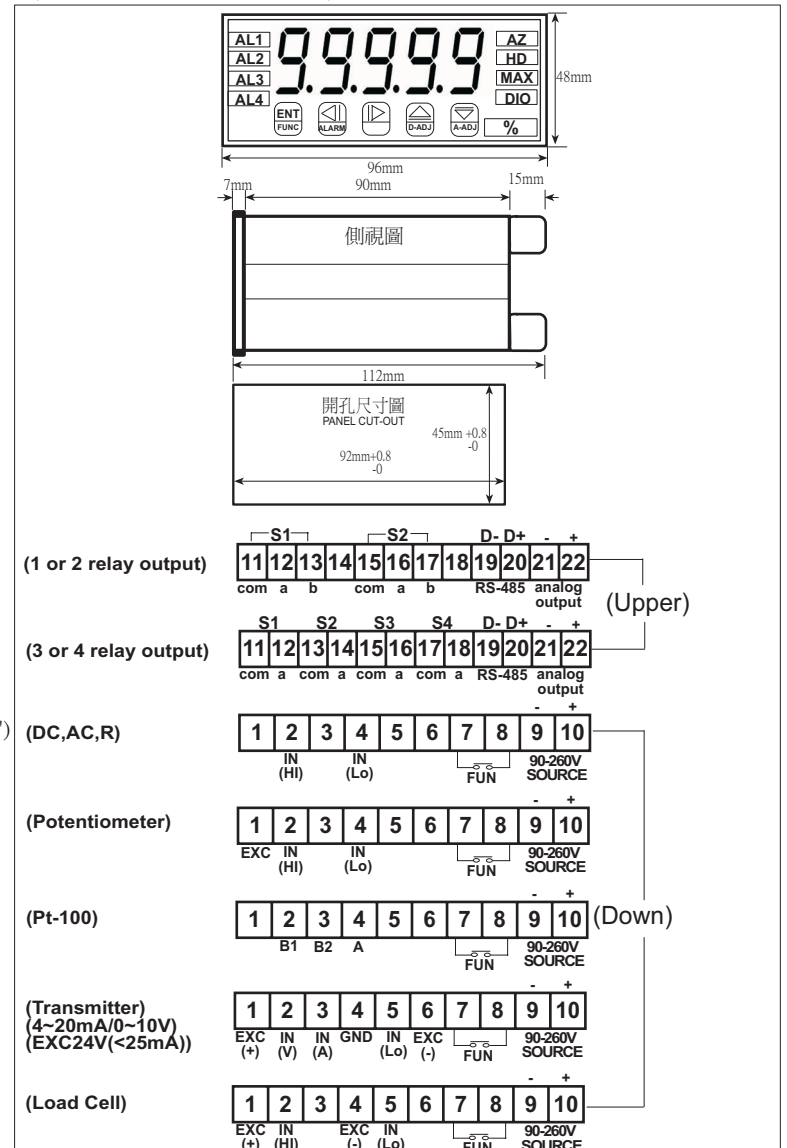
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V				
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												
R	Resistor	18	0~1000V	28	0~10.000A												
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED												

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.05% F.S.±1 digit
(精確度) (23±5°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)
- 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 : 16 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
< 10V for current mode
< [(V+)-7.5V]/20mA for two-wire mode
(輸出負載能力)
- 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 : 50ppm/°C (0~50°C)
(溫度係數)
- Display : Red high efficiency LEDs high 20.32mm(0.8")
(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)
1600 Vdc (input/output)
(絕緣耐壓能力)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
(存放環境條件)
- CE EMC Certification : EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001
(CE認證)

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.±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)

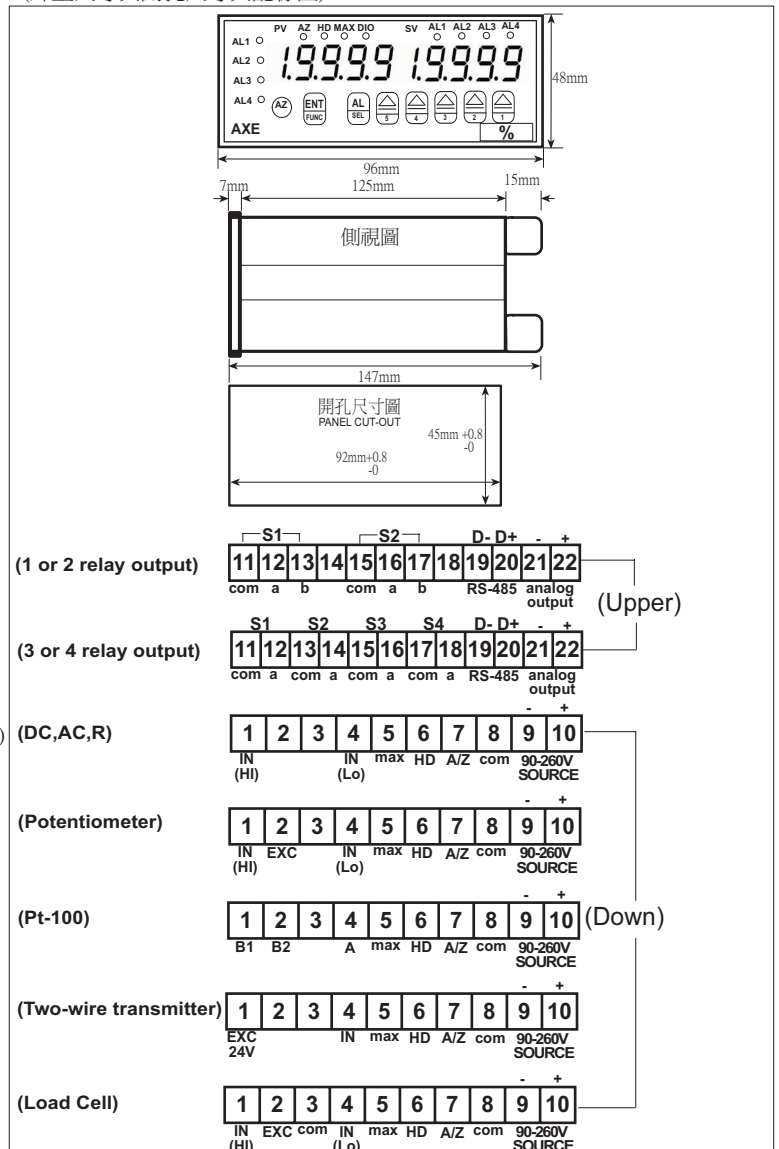
NO	Input Type	NO	DCV(ACV)	NO	DCA(ACA)	NO	Potentiometer	NO	Transmitter	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC	11	0~50mV	21	0~19.999uA	31	0~10%	41	DC4~20mA	0	None	0	None	N	None	A	AC/DC18~60V
B	AC(RMS)	12	0~5V	22	0~199.99uA	32	0~50%	42	DC1~5V	1	One	1	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	AC(TRMS)	13	0~10V	23	0~1.9999mA	33	0~100%	43	DC4~20mA	2	Two	2	DC0~10V				
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±5°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~±19999digit 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/°C (0~50°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°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)



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.±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 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)

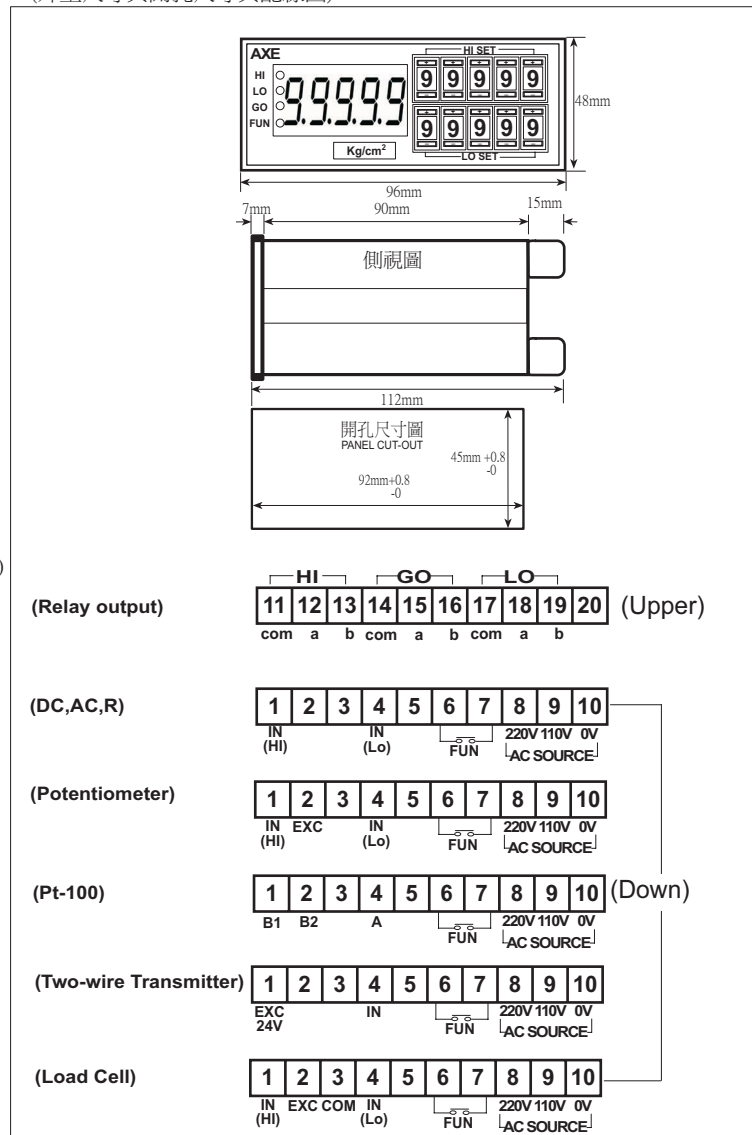
1. MODEL: MMX-AP - ⇒ X=4 (4 digit setting, -9999~+9999), X=5 (5 digit setting, 0~99999)
(選購型號)

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 *43/44 exciting DC24V(<25mA)		*Three wire connection		*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)											
L	LVDI	18	0~1000V	28	0~9.9999A												
R	Resistor	19	SPECIFIED	29	SPECIFIED												

2. SPECIFICATION (主要規格)

- Aux. power supply : AC110V&220V±20%(50 or 60Hz)
(輔助電源)
- Measuring accuracy : 0.05% F.S.±1 digit
(精確度) (23±5°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)
- Compar 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/°C (0~50°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°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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				
		9	SPECIFIED	9	SPECIFIED					9	SPECIFIED				

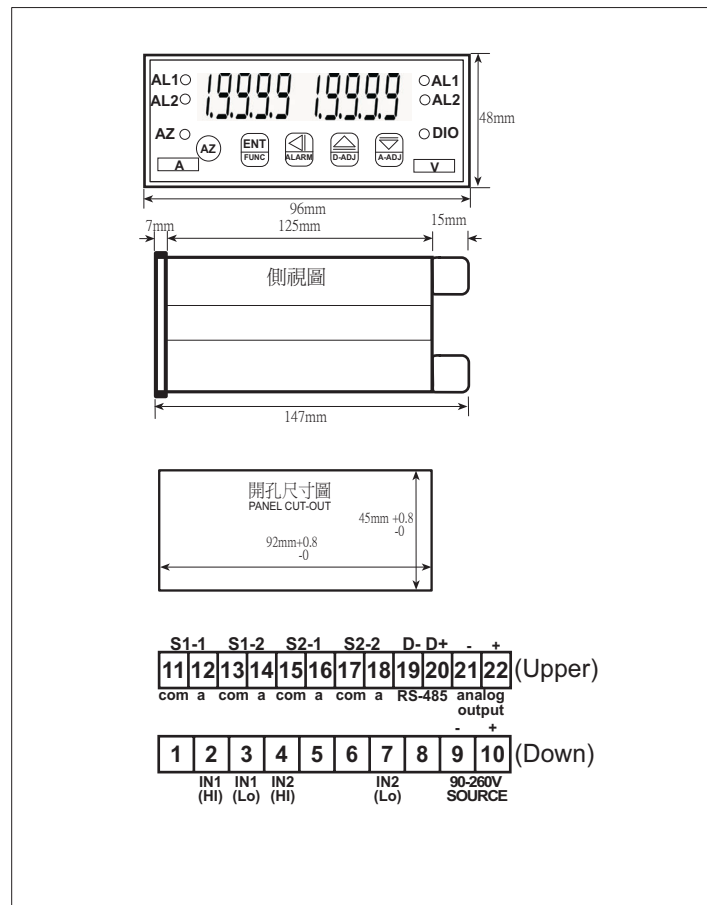
•Relay contact (AC250V-5A,DC30V-7A) •Modbus mode
•DC4~20mA •256 nodes on bus
•Less 4VA for AC/DC input

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

2.SPECIFICATION (主要規格)

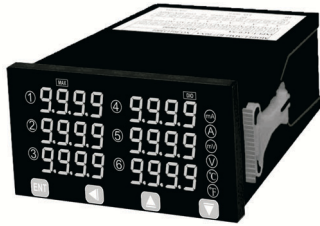
- Measuring accuracy : 0.1% F.S.±1 digit
(精確度) (23±5°C) 0.2% F.S.±1 digit(AC)
- Readout range : 0~±19999digit adjustable
(顯示值範圍)
- Alarm delay time : 0~99.9 second adjustable
(繼電器延遲動作時間)
- Alarm action : HI or Lo adjustable
(繼電器動作方向)
- Relay contact output : AC 250V-5A, DC 30V-7A
(繼電器容量)
- Analog output 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
< 10V for current mode
<[(V+)-7.5V]/20mA for two-wire mode
(輸出負載能力)
- 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/°C (0~50°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°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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.±1digit)
- 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)

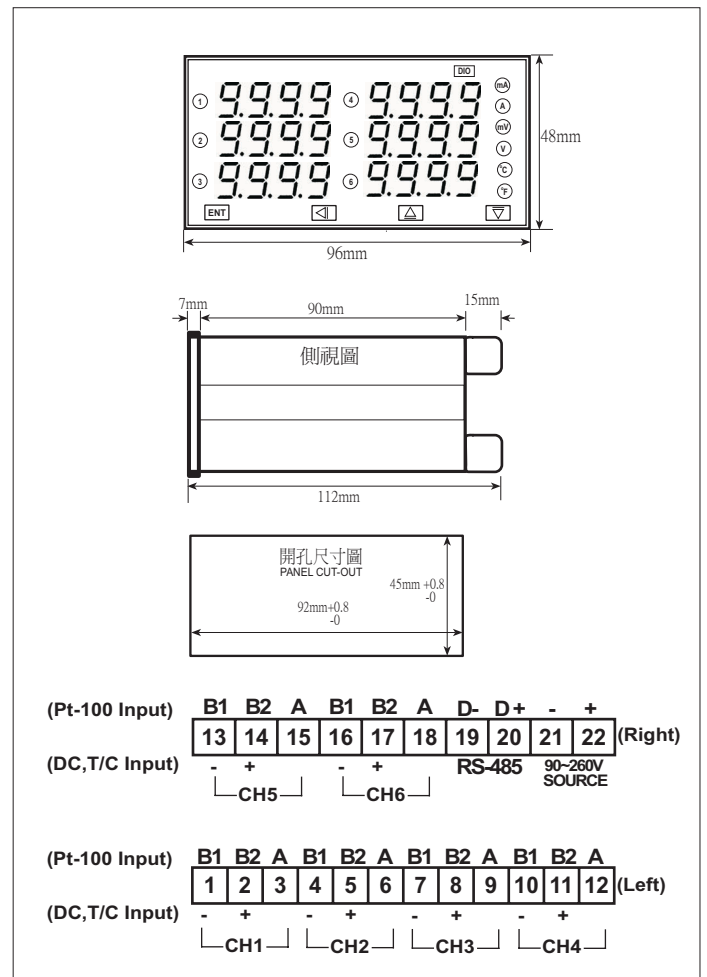
1.MODEL:MM8A- (選購型號)

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

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.05% F.S.±1 digit(mV,V,mA)
(精確度) (23±5°C) 0.1% F.S.±1 digit(Pt-100)
0.2% F.S.±0.5°C (CIC)Thermocouple)
- Cold junction compensation : <±0.5°C(0~70°C)
(冷接點補償)
- Readout range : -1999~9999 digit adjustable
(顯示值範圍)
- Over input indication : " doFL " or "-doFL"
(過載顯示)
- Polarity display : When input is negative " - " display
(極性顯示)
- Zero (offset) range : 0~±999 digit adjustable(individuality channel)
(歸零調整範圍)
- Span (scale) range : 0~±999 digit adjustable(individuality channel)
(最大值調整範圍)
- Sampling time : 1 cycles/sec.(total)
(取樣時間)
- RS-485 address : "01"~"FF"(0~255)
(通訊位址)
- RS-485 baud rate : 38400/19200/9600/4800/2400 selective
(傳輸速度)
- RS-485 protocol : Modbus RTU mode
(通信協議)
- Display : Red high efficiency LEDs high 7mm(0.28")
(顯示幕)
- Temp. coefficient : 50ppm/°C (0~50°C)
(溫度係數)
- 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/power)
(絕緣耐壓能力)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
(使用環境條件)
- Storage condition : 0~70°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)



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

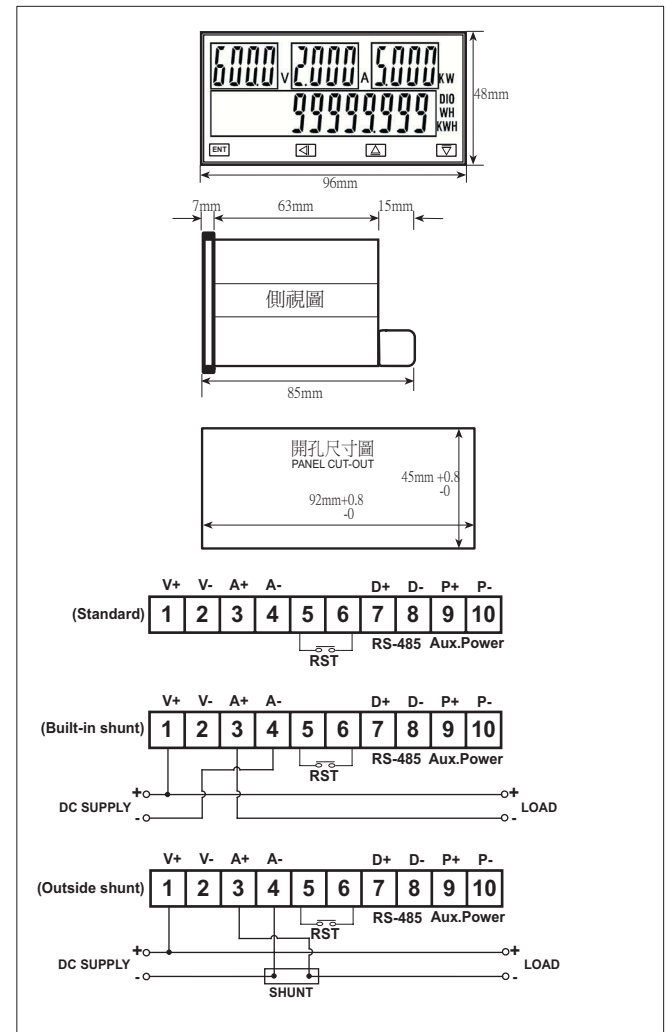
(選購型號)

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 • Less 1.5VA for AC90~240V
9	SPECIFIED		•Y (32 nodes on bus)•I (256 nodes on bus)		

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) : 0.05% F.S.±1 digit (23±5°C)
- 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))
0~99999999.999 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/°C (0~50°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°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)



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