

微電腦型轉速、線速錶(24x48mm)

(MICROPROCESS RPM & LINE-SPEED METER, 24x48mm) (PULSE INPUT)

MODEL
MRS

CE



■特點(FEATURES)

- 精確度0.01%滿刻度 (Accuracy 0.01% F.S.)
- 可量測 直流脈波/磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up)
- 最大輸入頻率 50KHz(Accepts input rates up to 50KHz)
- 轉速、線速可任意設定(Display type of RPM or line-speed can be modified)
- 線速單位 米, 英呎, 碼/分鐘可任意設定(Display unit M/min,Y/min,ft/min can be modified)
- 感應器輸入脈波數可任意設定(Input pulse of revolution can be modified (1~99999))
- 小數點位置可任意設定(Decimal point can be modified)
- 尺寸小, 穩隙性高(Dimension small and High stability)

1.MODEL:MRS-□ □ □ (選購型號)

NO	Input Type	NO	Display unit	NO	Aux. Power
A	Pulse (TTL) (5V)	1	RPM	A	AC/DC18~60V
B	Pulse (NPN) (12V)	2	M/min	B	AC/DC90~260V
C	Pulse (PNP) (12V)	3	Y/min		
D	Magnetic pick-up(50mV~1.5V)	4	f t/min		
E	Magnetic pick-up(500mV~15V)	9	SPECIFIED		
F	AC2~60V				
O	SPECIFIED				

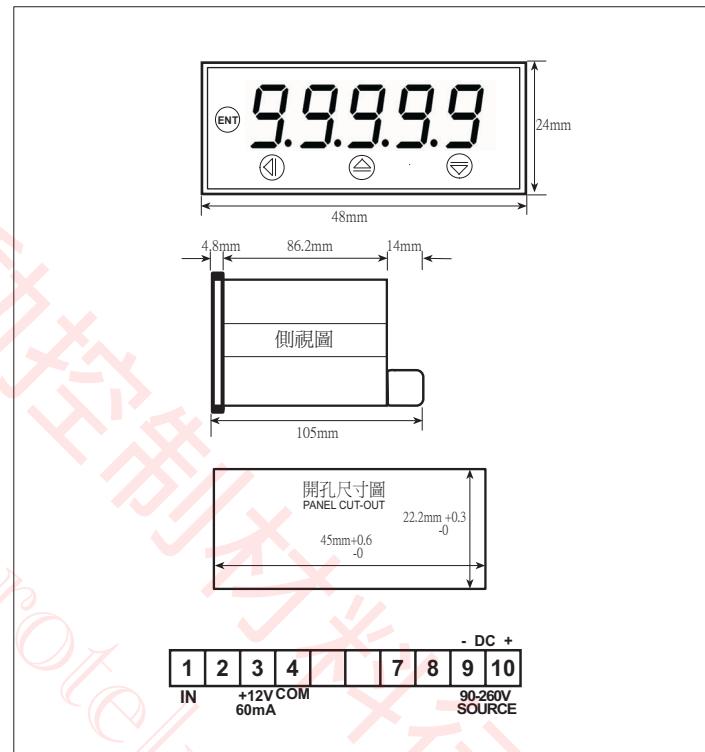
• LESS 3VA for AC/DC input

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.01% F.S. ($23 \pm 5^\circ\text{C}$) (精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP) (脈波輸入型式)
- Count input trigger levels : Hi bias (CMOS) ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) (脈波觸發電位)
- Max.count rates : Lo bias (TTL) ($V_{IH}=3.7\text{V}$, $V_{IL}=2.0\text{V}$) (最高輸入頻率)
- Sampling time : 50KHz (50% duty cycle)
- Over input indication : 10 cycles/sec. ($>10\text{Hz}$) (取樣時間)
- Readout range : f cycles/sec. ($<10\text{Hz}$) (過載顯示)
- Display : " doFL "
- Readout range : 0~99999 digit adjustable (顯示值範圍)
- Diameter setting : 0~9.9999M (Touch switches setting) (直徑設定範圍)
- Parameter setting : Touch switches (參數設方式)
- Display : Red high efficiency LEDs high 10.16mm (0.4") (顯示幕)
- Sensor power supply : 12VDC $\pm 3\%$ ($<60\text{mA}$) (感應器電源)
- Memory mode : Non-volatile E² PROM memory (記憶方式)
- Dielectric strength : 2KVac/1 min. (input/power/display) (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)



4.Ordering information(訂購方式)

MODEL:MRS-B1B

- Input Type : Pulse (NPN) (12V) (脈波輸入型式)
- Display unit : RPM (顯示值單位)
- Aux. power supper : AC/DC90~260V (輔助電源)

微電腦型轉速、線速錶 (MICROPROCESS RPM & LINE-SPEED METER) (PULSE INPUT)

MODEL
MR

CE



■特點(FEATURES)

- 精確度0.01%滿刻度 (Accuracy 0.01% F.S.)
- 可量測 直流脈波/磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up)
- 最大輸入頻率 50KHz(Accepts input rates up to 50KHz)
- 轉速線速可任意設定(Display type of RPM or line-speed can be modified)
- 線速單位 米, 英呎, 碼/分鐘可任意設定(Display unit M/min,Y/min,ft/min can be modified)
- 感應器輸入脈波數可任意設定(Input pulse of revolution can be modified (1~9999))
- 小數點位置可任意設定(Decimal point can be modified)
- 尺寸小, 穩隙性高(Dimension small and High stability)

1.MODEL:MR-□ □ □

(選購型號)

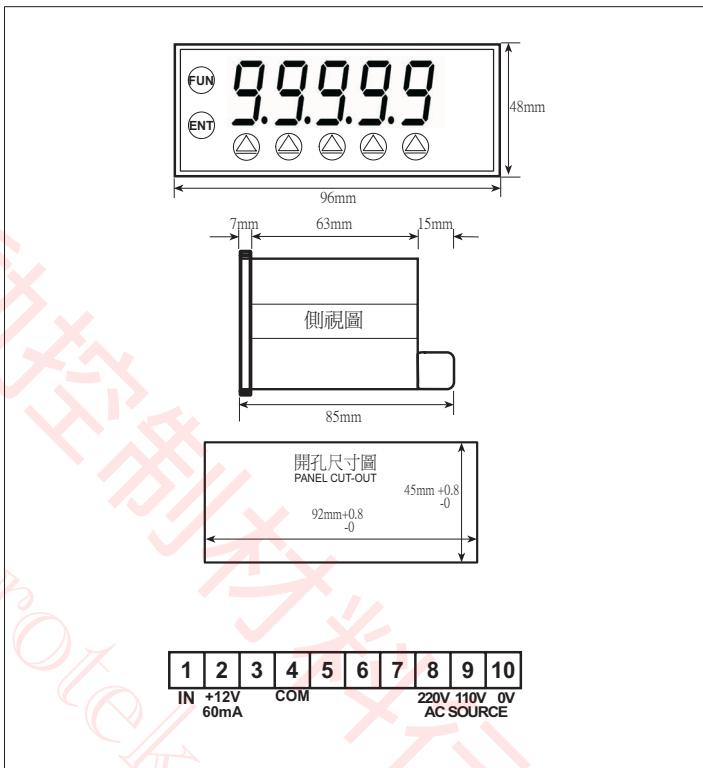
NO	Input Type	NO	Display unit	NO	Aux.Power
A	Pulse (TTL) (5V)	1	RPM	A	AC110/220V
B	Pulse (NPN) (12V)	2	M/min	O	SPECIFIED
C	Pulse (PNP) (12V)	3	Y/min		
D	Magnetic pick-up(50mV~1.5V)	4	f t/min		
E	Magnetic pick-up(500mV~15V)	9	SPECIFIED		
F	AC2~60V				
O	SPECIFIED				

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.01% F.S. (23±5°C)
(精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels : Hi bias (CMOS) ($V_{IH}=7.5V$, $V_{IL}=5.5V$)
Lo bias (TTL) ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max.count rates : 50KHz (50% duty cycle)
- Sampling time : 10 cycles/sec. (>10Hz)
f cycles/sec. (<10Hz)
- Over input indication : " doFL "
- Readout range : 0~99999 digit adjustable
- Diameter setting : 0~9.9999M (Touch switches setting)
- Parameter setting : Touch switches
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Sensor power supply : 12VDC±3%(<60mA)
- Memory mode : Non-volatile E² PROM memory
- Dielectric strength : 2KVac/1 min. (input/power/display)
- Operating condition : 0~50°C(20 to 90% RH non-condensed)
- Storage condition : 0~70°C(20 to 90% RH non-condensed)
- 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

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



4.Ordering information(訂購方式)

MODEL:MR-B1A

- Input Type : Pulse (NPN) (12V)
(脈波輸入型式)
- Display unit : RPM
(顯示值單位)
- Aux. power suppr : AC110V or 220V±20%(50 or 60Hz)
(輔助電源)

微電腦型轉速、線速控制錶

(MICROPROCESS RPM & LINE-SPEED CONTROLLER METER) (PULSE INPUT)

MODEL
MRS-S

CE



■特點(FEATURES)

- 精確度0.03%滿刻度 (Accuracy 0.03% F.S.)
- 可量測 直流脈波,磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up signal)
- 最大輸入頻率 50KHz(Accepts input rates up to 50KHz)
- 轉速,線速可任意設定(Display type of RPM or line-speed can be modified)
- 感應器輸入脈波數可任意設定(Input pulse of revolution can be modified (1~99999pulse/revolution))
- 多檔類比輸出切換功能(Multiplier bank analog output function)
- 2組警報功能(Two alarm function)(optional)
- 16 BIT 類比輸出功能(16 bit DAC analog output function)(optional)
- 數位RS-485介面(Digit RS-485 interface function)(optional)

1: MODEL:MRS-S

(選購型號)

NO	Input Type	NO	Input Type	NO	Display unit	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux.POWER	
A	Pulse (TTL) (5V)	E	Magnetic pick-up(500mV~15V)	1	RPM	0	None	N	None	N	None	A	AC/DC18~60V	
B	Pulse (NPN) (12V)	F	AC2~60V	2	M/min	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V	
C	Pulse (PNP) (12V)	G	SPECIFIED	3	Y/min	2	Two	V	DC0~10V					
D	Magnetic pick-up(50mV~1.5V)	H		4	f t/min	•Relay contact (AC250V-5A,DC30V-7A)		T	•DC4~20mA	•Modbus mode				•Less 4VA for AC/DC input
				9	SPECIFIED			R	SPECIFIED					

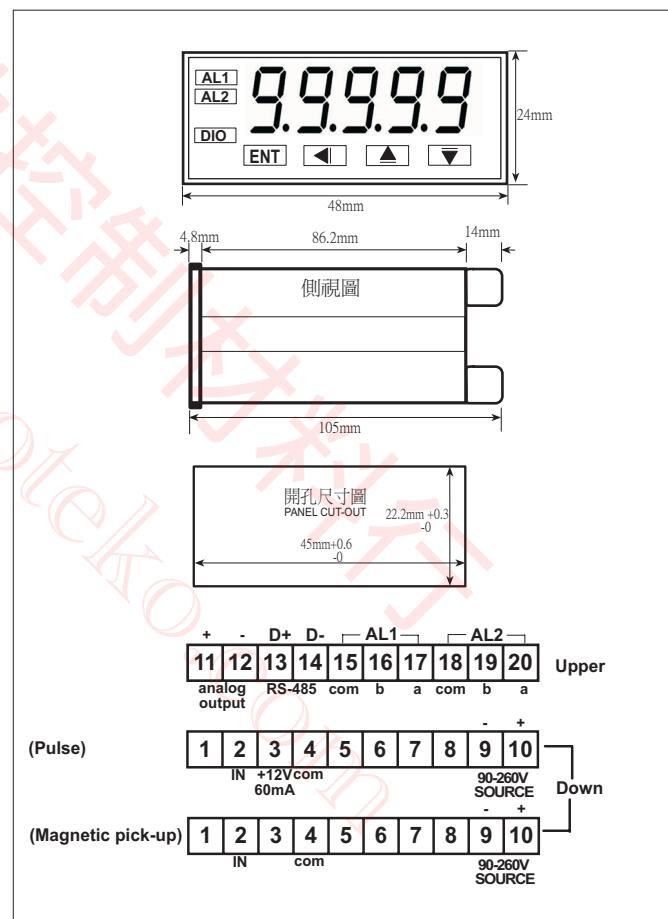
• Two-wire transmitter (Exciting voltage DC10~36V)

2: SPECIFICATION (主要規格)

- Measuring accuracy : 0.03% F.S. (23±5°C) (精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP) (脈波輸入型式)
- Count input trigger levels : HI bias (CMOS) ($V_{IH}=7.5V$, $V_{IL}=5.5V$) LO bias (TTL) ($V_{IH}=3.7V$, $V_{IL}=2.0V$) (脈波觸發電位)
- Max.count rates : 50KHz (50% duty cycle) (最高輸入頻率)
- Sampling time : 10 cycles/sec. (>10Hz) f cycles/sec. (<10Hz) (取樣時間)
- Over input indication : "doFL" (過載顯示)
- Readout range : 0 to 99999 digit adjustable (顯示值範圍)
- Diameter setting : 0 to 9.9999M (直徑設定範圍)
- Alarm action : HI or Lo adjustable (繼電器動作方向)
- Relay contact output : AC 250V-2.5A, DC 30V-5A (繼電器容量)
- Analog output resolution : 16 bit DAC (isolating) (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)
- Display : Red high efficiency LEDs high 10.16mm (0.4") (顯示幕)
- Parameter setting : Touch switches (參數設方式)
- Sensor power supply : 12VDC±3%(<50mA) (感應器電源)
- Memory mode : Non-volatile E² PROM memory (記憶方式)
- Dielectric strength : 1.5KVac/1 min. (input/power/display) 1600Vdc (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)



微電腦型雙輸入轉速，線速運算型電錶(顯示幕0.8") (MICROPROCESS DUAL INPUT RPM & LINE-SPEED MATHS METER) (DISPLAY 0.8")

MODEL
MMX-L

CE



■特點(FEATURES)

- 精確度0.01%滿刻度 (Accuracy 0.01% F.S.)
- 可量測 直流脈波/磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up)
- 最大輸入頻率 50KHz(Accepts input rates up to 1KHz)
- 轉速,線速可任意設定(Display type of RPM or line-speed can be modified)
- 線速單位 米, 英呎, 碼/分鐘可任意設定(Display unit M/min,Y/min,ft/min can be modified)
- 感應器輸入脈波數(1~99999)可任意設定(Input pulse of revolution (1~999) can be modified (1~99999))
- 雙輸入運算功能(Dual input math function B-A , B/A , (B/A)-1,1-(B/A), B/(A+B))
- 1組警報功能(One alarm function)(optional)
- 尺寸小、穩定性高(Dimension small and High stability)

1.MODEL:MMX-L □ □

(選購型號)

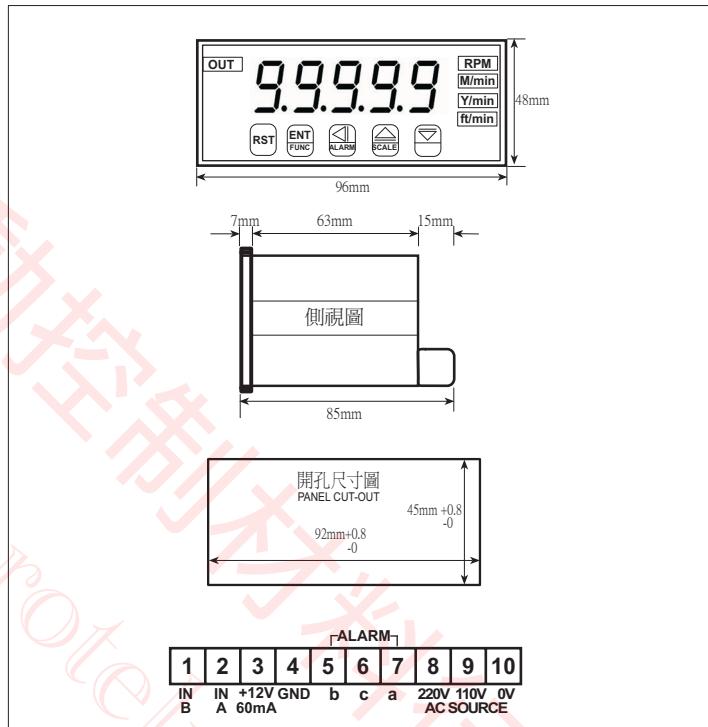
NO	Input Type	NO	Input Type	NO	Alarm output
A	Pulse (TTL) (5V)	E	Magnetic pick-up (50mV~15V)	0	None
B	Pulse (NPN) (12V)	F	AC2~60V	1	One
C	Pulse (PNP) (12V)	G	SPECIFIED		•Relay contact (AC250V-10A,DC30V-10A)
D	Magnetic pick-up (50mV~1.5V)				

2.SPECIFICATION (主要規格)

- Aux.power supper : AC110/220V±20%(50/60Hz)
(輔助電源)
- Measuring accuracy : 0.01% F.S. (23±5°C)
(精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
(脈波輸入型式)
- Count input trigger levels : Hi bias (CMOS) (V_{IH}=7.5V, V_{IL}=5.5V)
Lo bias (TTL) (V_{IH}=3.7V, V_{IL}=2.0V)
(脈波觸發電位)
- Max.count rates : 50KHz (50% duty cycle)
(最高輸入頻率)
- Sampling time : 10 cycles/sec. (>10Hz)
f cycles/sec. (<10Hz)
(取樣時間)
- Over input indication : " doFL "(過載顯示)
- Readout range : 0~99999 digit adjustable
(顯示值範圍)
- Diameter setting : 0~9.9999M (Touch switches setting)
(直徑設定範圍)
- Alarm action : HI or Lo adjustable
(繼電器動作方向)
- Relay contact output : AC 250V-10A, DC 30V-10A
(繼電器容量)
- Parameter setting : Touch switches
(參數設方式)
- Display : Red high efficiency LEDs high 20.32mm (0.8")
(顯示幕)
- Sensor power supply : 12VDC±3%(<60mA)
(感應器電源)
- Memory mode : Non-volatile E² PROM memory
(記憶方式)
- Dielectric strength : 2KVac/1 min. (input/power/display)
(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)



4.Ordering information(訂購方式)

MODEL:MMX-LB0

- Input Type : Pulse (NPN) (12V)
(脈波輸入型式)
- Display unit : RPM
(顯示值單位)
- Alarm output : None
(警報功能)

微電腦型轉速、線速控制錶

(MICROPROCESS RPM & LINE-SPEED CONTROLLER METER) (PULSE INPUT)

MODEL
MMR

CE



■特點(FEATURES)

- 精確度0.03%滿刻度 (Accuracy 0.03% F.S.)
- 可量測 直流脈波,磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up signal)
- 最大輸入頻率 50KHz(Accepts input rates up to 50KHz)
- 轉速,線速可任意設定(Display type of RPM or line-speed can be modified)
- 感應器輸入脈波數可任意設定(Input pulse of revolution can be modified (1~99999pulse/revolution))
- 2組警報功能(Two alarm function)(optional)
- 15 BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485介面(Digit RS-485 interface function)(optional)

1: MODEL: MMR-□ □ - □ □ □ (選購型號)

NO	Input Type	NO	Input Type	NO	Display unit	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. POWER
A	Pulse (TTL) (5V)	E	Magnetic pick-up(500mV~15V)	1	RPM	0	None	N	None	N	None	A	AC/DC18~60V
B	Pulse (NPN) (12V)	F	AC2~60V	2	M/min	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	Pulse (PNP) (12V)	G	SPECIFIED	3	Y/min	2	Two	V	DC0~10V				
D	Magnetic pick-up(50mV~1.5V)	H		4	f t/min	•Relay contact (AC250V-5A,DC30V-7A)		T	•DC4~20mA		•Modbus mode •256 nodes on bus		•Less 4VA for AC/DC input
				9	SPECIFIED			R	SPECIFIED				

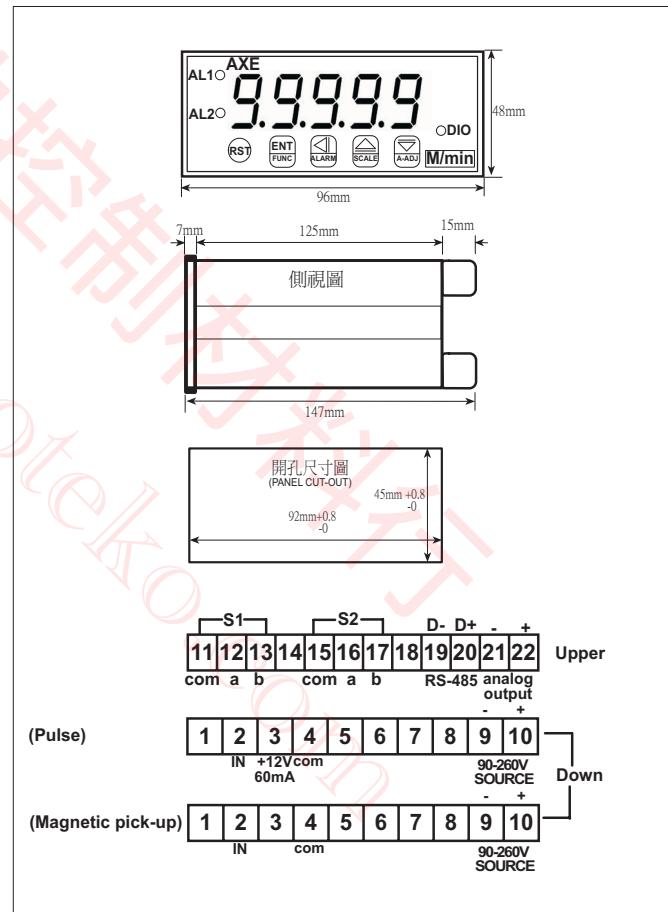
*Two-wire transmitter (Exciting voltage DC10~36V)

2: SPECIFICATION (主要規格)

- Measuring accuracy : 0.03% F.S. (23±5°C)
(精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels : HI bias (CMOS) ($V_{IH}=7.5V$, $V_{IL}=5.5V$)
LO bias (TTL) ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max.count rates : 50KHz (50% duty cycle)
- Sampling time : 10 cycles/sec. (>10Hz)
f cycles/sec. (<10Hz)
- Over input indication : " doFL "
- Readout range : 0 to 99999 digit adjustable
- Diameter setting : 0 to 9.9999M
- Alarm action : HI or Lo adjustable
- Relay contact output : AC 250V-5A, DC 30V-7A
- Analog output resolution : 15 bit DAC (isolating)
- Response time : < 250ms(0~90%)
- Output drive capability : < 10mA for voltage mode
< 10V for current mode
<[(V+)-7.5V]/20mA for two-wire mode
- Output ripple (p-p) : < 0.1% F.S.
- Output power supply : "01"~"FF"(0~255)
- RS-485 address : 19200/9600/4800/2400 selective
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Sensor power supply : 12VDC±3%(<60mA)
- Memory mode : Non-volatile E² PROM memory
- Dielectric strength : 2KVac/1 min. (input/power/display)
1600Vdc (input/output)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
- 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

3: OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型雙輸入轉速、線速運算型控制電錶 (MICROPROCESS DUAL INPUT RPM & LINE-SPEED MATHS CONTROLLER METER)

MODEL
MMX-R

CE



■特點(FEATURES)

- 精確度0.03%滿刻度 (Accuracy 0.03% F.S.)
- 可量測 直流脈波,磁性感應器信號(Measuring Pulse(TTL,CMOS), Magnetic pick-up signal)
- 雙輸入運算功能(Dual input math function B-A, B/A, (B/A)-1,1-(B/A), B/(A+B))
- 最大輸入頻率 30KHz(Accepts input rates up to 30KHz)
- 轉速,線速可任意設定(Display type of RPM or line-speed can be modified)
- 感應器輸入脈波數可任意設定(Input pulse of revolution can be modified (1~99999pulse/revolution))
- 2組警報功能(Two alarm function)(optional)
- 15 BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485介面(Digit RS-485 interface function)(optional)

1: MODEL: MMX-R □ □ - □ □ □ □
(選購型號)

NO	Input Type	NO	Input Type	NO	Display unit	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. POWER
A	Pulse (TTL) (5V)	E	Magnetic pick-up(500mV~15V)	1	RPM	0	None	N	None	N	None	A	AC/DC18~60V
B	Pulse (NPN) (12V)	F	AC2~60V	2	M/min	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	Pulse (PNP) (12V)	O	SPECIFIED	3	Y/min	2	Two	V	DC0~10V				Modbus mode
D	Magnetic pick-up(50mV~1.5V)			4	f/min		•Relay contact (AC250V-5A,DC30V-7A)	T	•DC4~20mA				•256 nodes on bus
				9	SPECIFIED			R	SPECIFIED				•Less 4VA for AC/DC input

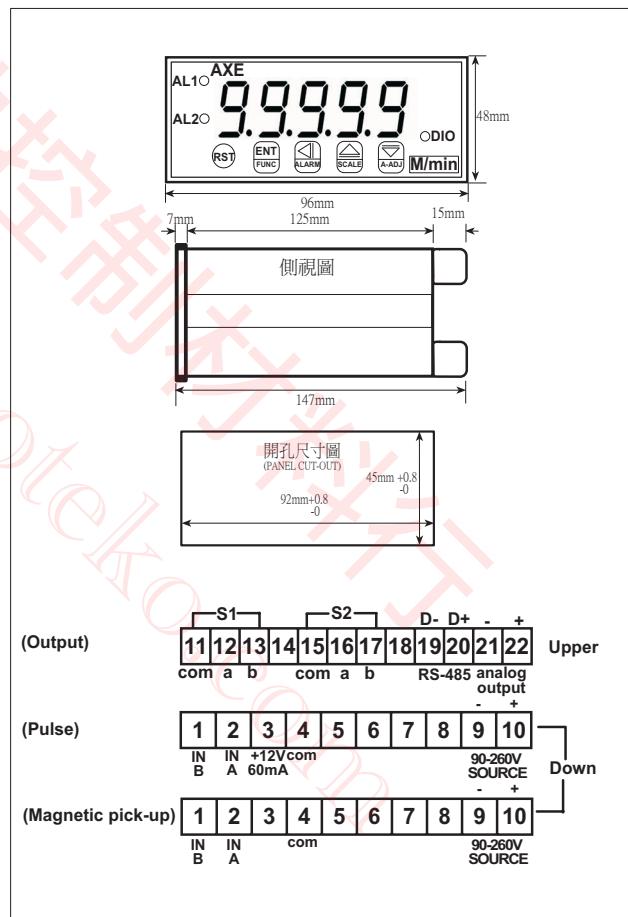
• Two-wire transmitter (Exciting voltage DC10~36V)

2:SPECIFICATION (主要規格)

- Measuring accuracy : 0.03% F.S. (23 ±5°C)
(精確度)
- Count input type : Switch selectable current sourcing(NPN) or current sinking(PNP)
- Count input trigger levels : HI bias (CMOS) (V_{IH} =7.5V, V_{IL} =5.5V)
LO bias (TTL) (V_{IH} =3.7V, V_{IL} =2.0V)
- Max.count rates : 30KHz (50% duty cycle)
- Sampling time : 10 cycles/sec. (>10Hz)
f cycles/sec. (<10Hz)
- Over input indication : " doFL "
- Readout range : -19999 to 99999 digit adjustable
- Diameter setting : 0 to 9.9999M
- Alarm action : HI or Lo adjustable
- Relay contact output : AC 250V-5A, DC 30V-7A
- Analog output resolution : 15 bit DAC (isolating)
- Response time : < 250ms(0~90%)
- Output drive capability : < 10mA for voltage mode
< 10V for current mode
 $<[(V+)-7.5V]/20mA$ for two-wire mode
- Output ripple (p-p) : < 0.1% F.S.
- RS-485 address : "01"~"FF"(0~255)
- RS-485 baud rate : 19200/9600/4800/2400 selective
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Sensor power supply : 12VDC±3%(<60mA)
- Memory mode : Non-volatile E² PROM memory
- Dielectric strength : 2KVac/1 min. (input/power/display)
1600Vdc (input/output)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
- 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

3:OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型長度、流量顯示控制錶

(MICROPROCESS LENGTH, FLOW CONTROLLER METER) (PULSE INPUT)

MODEL
MMC

CE



■特點(FEATURES)

- 顯示範圍-19999至99999位數(Readout range from -19999 to 99999)
- 最高輸入頻率 10KHz(Accepts input rates up to 10KHz)
- 計數速度 50,500脈波/秒可選擇(Accept input rates 50 or 5000 CPS can be modified)
- 四種輸入模式可選擇(加算,減算,加減算,90度相位差加減算)
(Four counting modes Up,Down,Up/Down, quadrature can be modified)
- 90度相位差加減算具有提高解析度4倍功能 (Quadrature sensing up to 4 times resolution)
- 輸入脈波具有預設刻度功能(Input scaling multiplied 0.0001 to 9,9999 can be modified)
- 2組警報功能(Two alarm function)(optional)
- 15 BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485介面(Digit RS-485 interface function)(optional)

1: MODEL:MMC-□
(選購型號)

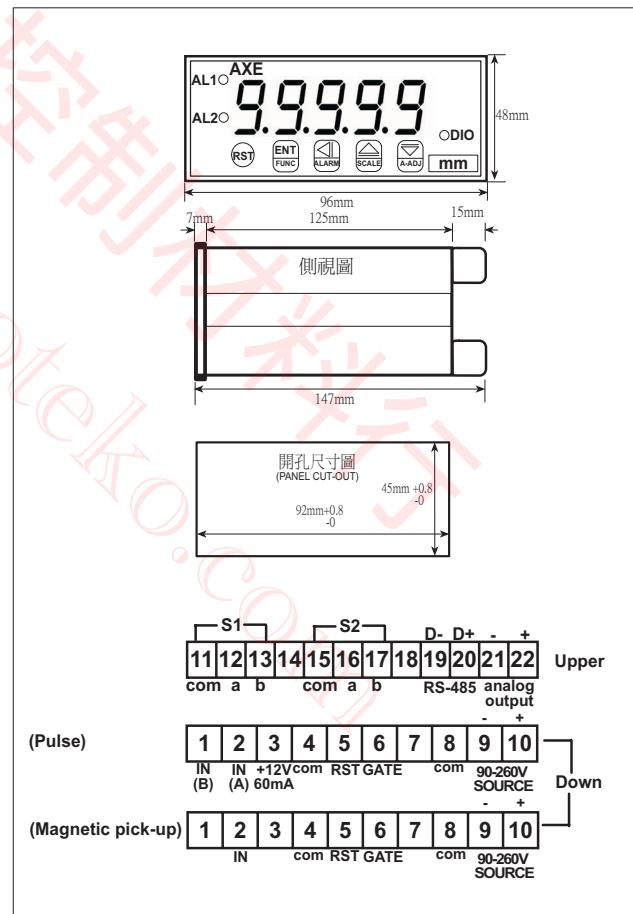
NO	Input Type	NO	Input rates	NO	Counting Mode	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. POWER
A	Pulse (TTL) (5V)	1	50 pulse/sec.	1	Up	0	None	N	None	N	None	A	AC/DC18~60V
B	Pulse (NPN) (12V)	2	5000 pulse/sec.	2	Down	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	Pulse (PNP) (12V)			3	Up/Down	2	Two	V	DC0~10V				Modbus mode •256 nodes on bus
D	Magnetic pick-up(50mV~1.5V)			4	Quadrature	T	•Relay contact (AC250V-5A,DC30V-7A)	•DC4~20mA		R	SPECIFIED		•Less 4VA for AC/DC input
E	Magnetic pick-up(500mV~15V)												•Two-wire transmitter (Exciting voltage DC10~36V)
F	AC2~60V												
O	SPECIFIED												

2: SPECIFICATION (主要規格)

- Count input type (脈波輸入型式) : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels (脈波觸發電位) : HI bias (CMOS) ($V_{IH}=7.5V$, $V_{IL}=5.5V$)
LO bias (TTL) ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max.count rates (最高輸入頻率) : <10KHz (up , down , up/down mode)
<5KHz (quadrature mode)
- Over input indication (過載顯示) : " doFL " and "-doFL "
- Readout (compare) range (顯示值範圍) : -19999 to 99999 digit 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 (isolating)
- Response time (輸出反應速度) : $< 1/f + 10 \text{ ms} (0\sim90\%)$
- Output drive capability (輸出負載能力) : $< 10\text{mA}$ for voltage mode
 $< 10\text{V}$ for current mode
 $< [(V)-7.5V]/20\text{mA}$ for two-wire mode
 $< 0.1\% \text{ F.S.}$
- Output ripple (p-p) (輸出之漣波) : " 01 "~" FF "($0\sim255$)
- RS-485 address (通訊位址) : "01"~"FF"($0\sim255$)
- RS-485 baud rate (傳輸速度) : 19200/9600/4800/2400 selective
- Display (顯示幕) : Red high efficiency LEDs high 14.22mm (0.56")
- Sensor power supply (感應器電源) : 12VDC $\pm 3\%$ ($<60\text{mA}$)
- Memory mode (記憶方式) : Non-volatile E² PROM memory
- Dielectric strength (絕緣耐壓能力) : 2KVac/1 min. (input/output/power)
1600Vdc (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)



微電腦型類比輸入瞬間量，累積量(9位數)顯示控制電錶 (MICROPROCESS RATE & TOTALIZER CONTROLLER METER)

MODEL
MRT

CE



■特點(FEATURES)

- 顯示範圍0至19999(瞬間量),0至999999999(9位數累積量)可任意規劃
(Programable rate 0 to 19999 digit (rate),0 to 999999999 digit (totalizer))
- 精確度0.05%滿刻度±1位數(Accuracy 0.05%F.S.±1digit)
- 瞬間量與累積量時間基數可任意規劃(1或60或3600秒)(Programable time base (1,60,3600 second))
- 瞬間量之最高顯示值可任意規劃(0至19999)(Programable rate 0 to 19999 digit)
- 累積量之輸入脈波比例刻調整可任意規劃(0.00001至9999.99999)
(Programable scale factor (0.00001 to 9999.99999) (totalizer))
- 具有開根號功能(Math-rootextractor function)
- 具有9段線性折補功能(Correction for non-linearity function(9 segments))(optional)
- 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)
- 數位脈波同步輸出功能(Digital pulse output function) (optional)

1.MODEL:MRT-□ □ □ - □ □ - □ X=0(none-pulse output) X=P(1 pulse/conut output)

(選購型號)

NO	Input Type	NO	Input Function	NO	Alarm	NO	Analog output	NO	RS-485 output	NO	Aux. Power
A	DC1~5V	N	Normal	0	Non-alarm	N	None	N	None	A	AC/DC 18V~60V
B	DC4~20mA	Y	Math-rootextractor	1	One-alarm	I	DC4~20mA	Y	RS-485	B	AC/DC 90V~260V
C	•DC1~5V			2	Two-alarm	V	DC0~10V		•Modbus RTU mode •256 nodes on bus		•Less 5VA for AC/DC input
D	•DC4~20mA				•Pulse output only one-alarm	T	DC4~20mA				
O	SPECIFIED					R	SPECIFIED				

Note:•Exciting supply DC24V(<25mA)

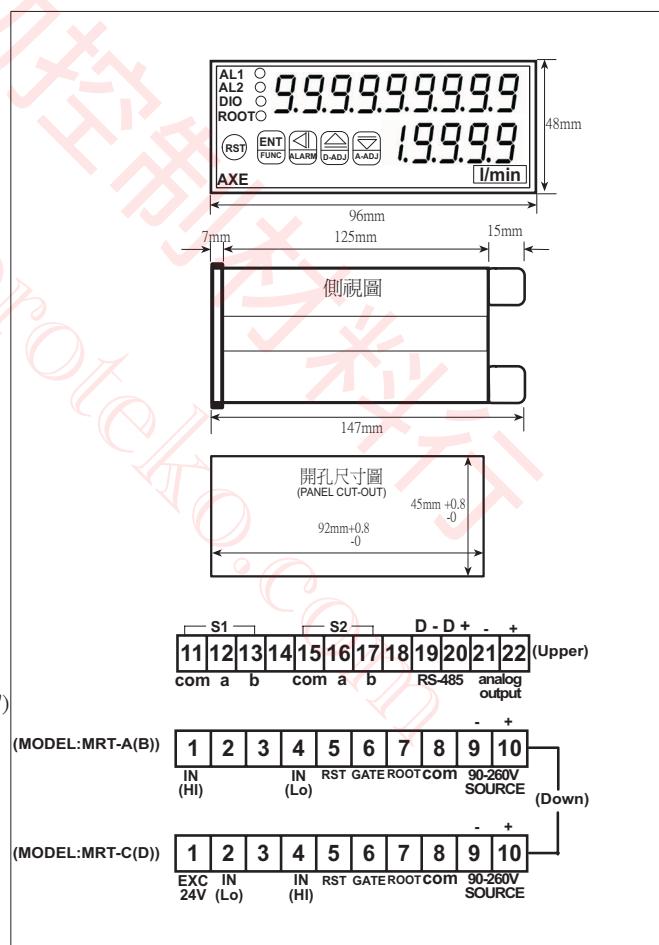
•Two-wire transmitter (Exciting voltage DC10~36V)

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.05% F.S.±1 digit (rate) (23±5°C)
(精確度)
- Sampling time : 16 cycles/sec.
(取樣時間)
- Over input indication : " doFL "
- Readout (compare) range : 0~19999 adjustable(rate)
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
- 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
< 10V for current mode
<[(V+)-7.5V]/20mA for two-wire mode
< 0.1% F.S.
- Output ripple (p-p) : 19200/9600/4800/2400 selective
- RS-485 baud rate : 100ppm/°C (0~50°C)
- RS-485 address : "01"~"FF"(0~255)
- Temp. coefficient : Red high efficiency LEDs high 10.16 mm(0.4")
- Display : Non-volatile E² PROM memory
- Memory mode : 2KVac/1 min. (input/output/power)
1600Vdc (input/output)
- Dielectric strength : 0~50°C (20 to 90% RH non-condensed)
- Operating condition : 0~70°C (20 to 90% RH non-condensed)
- Storage condition : 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 EMC Certification (CE認證)

3.OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)



微電腦型脈波輸入瞬間量，累積量(9位數)顯示控制電錶 (MICROPROCESSOR RATE & TOTALIZER CONTROLLER METER)(PULSE INPUT)

MODEL
MFRT

■特點(FEATURES)

- 顯示範圍0至19999(瞬間量),0至999999999(9位數累積量)可任意規劃
(Programmable rate 0 to 19999 digit (rate), 0 to 999999999 digit (totalizer))
- 精確度0.03%滿刻度(瞬間量) (Accuracy 0.03% F.S. (rate))
- 頻率輸入範圍 0.01Hz 至 10KHz (Input range from 0.01Hz to 10KHz)
- 瞬間量與累積量時間基數可任意規劃(1或 60 或 3600 秒)(Programmable time base(1,60,3600 second))
- 瞬間量之最高顯示值可任意規劃(0至19999)(Programmable rate 0 to 19999 digit)
- 累積量之輸入脈波比例刻劃調整可任意規劃(0.00001至9999.99999)
(Programmable scale factor (0.00001 to 9999.99999) (totalizer))
- 具有二組警報功能(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)
- 數位脈波同步輸出功能(Digital pulse output function) (optional)

1.MODEL:MFRT-□ □-□ □ □ - X X=0(none-pulse output) X=P(1 pulse/conut output)(Pulse output only one-alarm)
(選購型號)

NO	Input Type	NO	Input Type	NO	Input Type	NO	Input rates	NO	Alarm Output	NO	Analog output	NO	RS-485 output	NO	Aux. Power
A	Pulse(TTL)(5V)	D	Magnetic pick-up (AC50mV~1.5V)	F	AC2~60V	1	150 pulse/sec	0	Non-alarm	N	None	N	None	A	AC/DC 18~60V
B	Pulse(NPN)(12V)	O	SPECIFIED	2	15000 pulse/sec	1	One-alarm	I	DC4~20mA	Y	RS-485	B	AC/DC 90~260V		
C	Pulse(PNP)(12V)	E	Magnetic pick-up (AC500mV~15V)			*50 pulse/sec. for relay contacts input	2	Two-alarm	V	DC0~10V	T	DC4~20mA	*Modbus RTU mode • 256 nodes on bus		*Less 5VA for AC/DC input

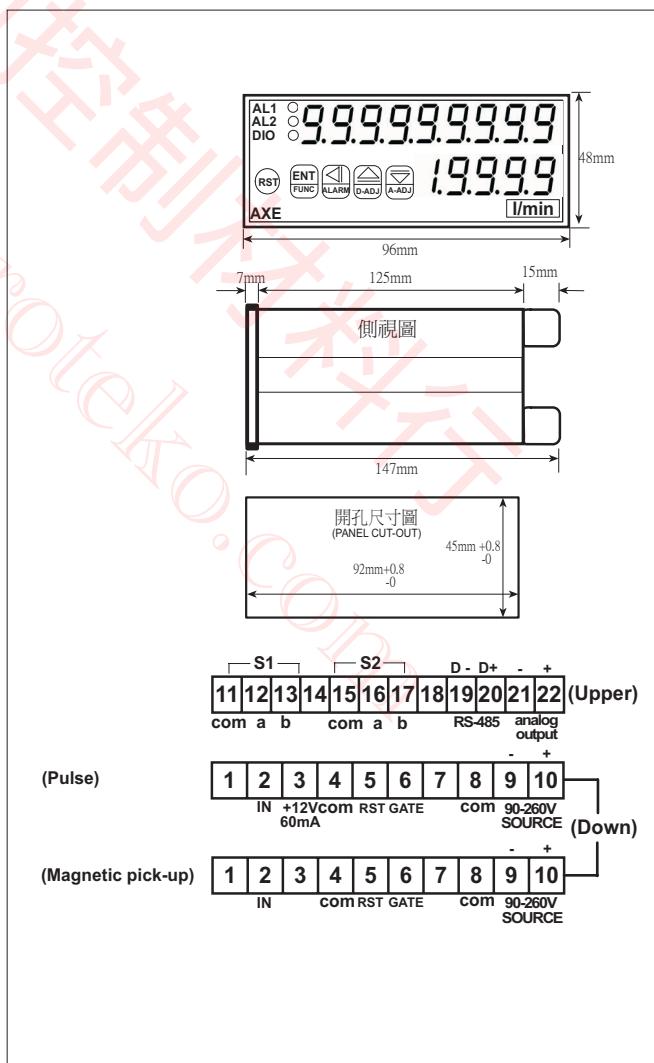
*Two-wire transmitter (Exciting voltage DC10~36V)

2.SPECIFICATION (主要規格)

- Measuring accuracy : 0.03% F.S.(rate) (23±5°C)
(精確度)
- Count input type : Switch selectable current sourcing(NPN) or current sinking (PNP)
(脈波輸入型式)
- Count input trigger levels : HI bias (CMOS) (V_{IH}=7.5V,V_{IL}=5.5V)
Lo bias (TTL) (V_{IH}=3.7V,V_{IL}=2.0V)
(脈波動作電位)
- Max. count rates : <10KHz (50% duty cycle)(pulse)
<10KHz (magnetic pick-up)
- Sampling time : 10 cycles/sec. (>10Hz)(rate)
f cycle/sec. (<10Hz)(rate)
- Readout (compare) range : 0~19999 adjustable(rate)
0~999999999 adjustable (totalizer)
(顯示值(比較值)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)
- Analog output resolution : 15 bit DAC (isolating)
(類比輸出解析度)
- Response time : < 1/f + 10ms (0~90%)
(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 baud rate : 19200/9600/4800/2400 selective
(傳輸速率)
- RS-485 address : "01"~"FF"(0~255)
(通訊位址)
- Display : Red high efficiency LEDs high 10.16 mm (0.4")
(顯示幕)
- 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)
- 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)



類比與脈波輸入流量瞬間量/累積量/批量顯示控制電錶 (PULSE/ANALOG INPUT FLOW RATE/TOTALIZER/BATCH CONTROLLER (two-stage)METER)

MODEL
MRT-B

■特點(FEATURES)

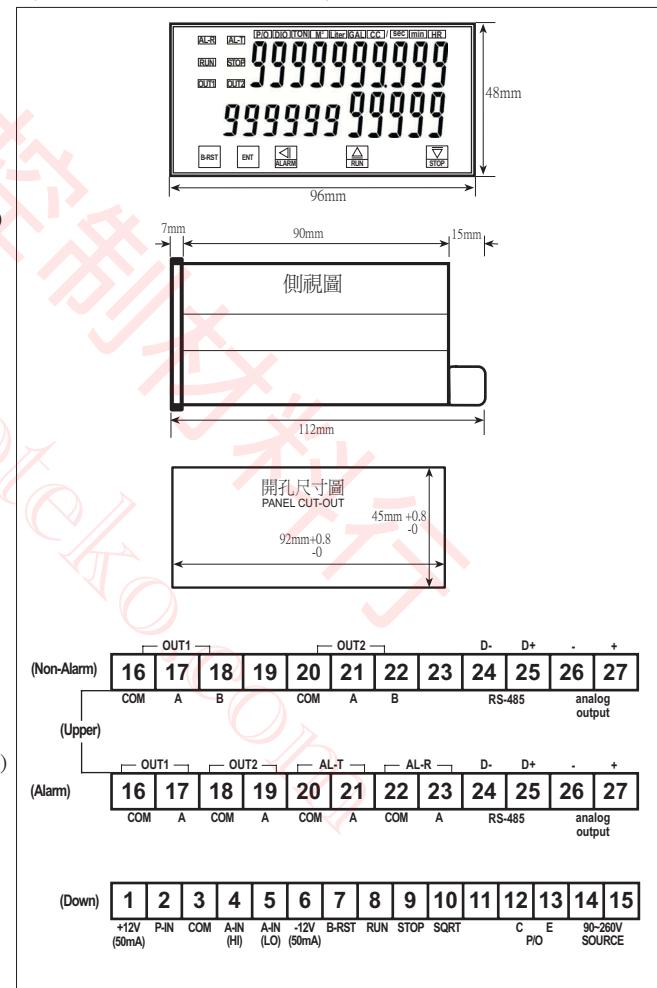
- 精確度0.05%滿刻度±1位數(Accuracy 0.05% F.S.±1 digit)
- 可同時量測與顯示瞬間量(5位數)/批量(6位數)/累積量(10位數)
(Measuring and display rate(5 digits)/batch(6 digits)/totalizer(10 digits))
- 5種流量單位可任意設定(Display flow unit TON/M³/Liter/GAL/CC can be modified)
- 4種時間基數可任意規劃(1或60或3600或86400秒)
(Programmable time base(1 or 60 or 3600 or 86400 second))
- 批量控制採用前置量預停設定方式(Prestop counting function)
- 批量控制具有向上或向下計數模式可規劃(Two-counting mode Up/Down for batch controller)
- 面板具有起動/停止/批量復歸按鈕功能
(Front panel push buttons allow the operator to start/stop/batch reset function)
- 防護等級NEMA4/IP64(Protection class NEMA4/IP64)

1. MODEL:MRT-B □ □ □ - □ □ (選購型號)

NO	Input Type	NO	Input Type	NO	Linearity function	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	DC1~5V & NPN/PNP Voltage pulse	O	SPECIFIED	N	None	0	None	N	None	N	None	A	AC/DC18~60V
B	DC4~20mA & NPN/PNP Voltage Pulse		• DC4~20mA (input impedance=50 ohm)	Y	16 point(linearity)	2	Rate/Totalizer	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	DC1~5V & Magnetic pick-up		• DC1~5V (input impedance=500 Kohm)		• Only analog input type		• Relay contact(AC250V-5A DC30V-7A)	V	DCA~10V		• Modbus RTU mode • 256 nodes on bus		• Less 5VA for AC/DC input
D	DC4~20mA & Magnetic pick-up							R	SPECIFIED				

2. SPECIFICATION (主要規格)

- Measuring accuracy : 0.05% F.S.±1 digit(Rate/Analog input)
(精確度)(23±5°C)
- Readout/compare range : 0~99999 digit(Rate)/0~999999 digit(Batch)
(顯示值/比較值範圍)
- Input type : In side jump selectable:
DC4~20mA/DC1~5V(Analog)
Current sourcing(NPN)/Current sinking(PNP)/
Switch contact(Pulse)
- Count input trigger levels : High level:V_{IH}=DC4~30V(Pulse)
V_{IH}=AC30mV~30V(Magnetic pick-up)
V_{IH}=Rmax.<500 ohm(Switch contact)
Low level:V_{IL}=DC0~2V(Pulse)
V_{IL}=AC0~20mV(Magnetic pick-up)
V_{IL}=Rmax.>1K ohm(Switch contact)
- Max.count rates : <10KHz(50% duty cycle(Pulse))
<1KHz(Magnetic pick-up)
<100Hz(Switch contact)
- Batch controller start time delay : 0 to 99 second adjustable(Output2)
(批量控制器輸出2起動延遲時間)
- Batch controller prestop range : 0 to 9999 digit adjustable(Output2)
(批量控制器輸出2預停前置量)
- Batch controller counting modes : Up or Down can be modified
(批量控制器輸出復歸方式)
- Batch controller output reset type : Manual(N) or Auto restart(A) can be modified
(批量控制器輸出復歸方式)
- Analog output resolution : 16 bit DAC
(類比輸出解析度)
- Response time : < 50ms(0~90%)
(輸出反應速度)
- Output drive capability : < 10mA for voltage mode
< 10V for current mode
- Pulse output : Photo couple of open-collector(Max.DC30V/50mA)
(脈波輸出容量)
(Synchronize totalizer)(Max.100Hz)
- RS-485 address : "01" ~ "FF"(0~255)
- RS-485 baud rate : 38400/19200/9600/4800/2400 selective
(傳輸速度)
- Temp. coefficient : 50ppm/°C (0~50°C)
(溫度係數)
- Display : Red high efficiency LEDs high 10.16mm(0.4")
(顯示幕)
Red high efficiency LEDs high 7.0mm(0.28")
(Batch)
- 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)
- Operating condition : 1600Vdc (input/output)
(使用環境條件)
- Storage condition : 0~50°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)

轉子式流量控制錶

(PADDLEWHEEL FLOW CONTROLLER METER)

MODEL
SL2

■特點(FEATURES)

- 高警報效果,當警報動作時顯示幕自動變換顏色(紅/綠色)
(Auto. change red or green display when alarm status changes)
- 精確度 $\pm 0.75\%$ 滿刻度 (Accuracy $\pm 0.75\%$ of full scale)
- 量測管徑範圍15至600mm(0.5至24英吋)(Measuring pipe size range DN 15 to DN 600(0.5 to 24 inch.))
- 量測流速範圍0.1至8米/秒(0.33至26英呎/秒)(Measuring flow velocity range 0.1 to 8 M/s(0.33 to 26 Ft/s))
- 寬範圍電源輸入,直流14至28伏特(Field-rangable supply voltage from DC 14 to 28 V)
- 4種流量單位可任意設定(Display flow units Liter,GAL,M³,TON can be modified)
- 2組警報功能(Dual 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)
- 防護等級NEMA4/IP65(Protection class NEMA4/IP65)

1.MODEL:SL2- □ □ - □ □ □ □ □ □

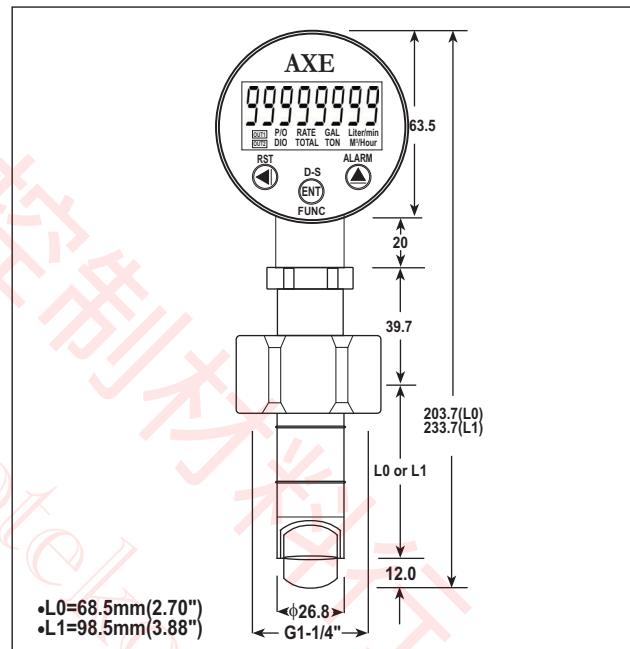
(選購型號)

NO	Sensor body	NO	Sensor Length	NO	Alarm Output	NO	Analog Output	NO	RS-485 Output	NO	Pulse Output	NO	O-rings	NO	Cable length
P	Polypropylene	0	68.5mm(L0)	0	None	0	None	N	None	N	None	F	FKM(全氟化橡膠)	8	8M(standard)
V	Natural PVDF	1	98.5mm(L1)	2	Two Relay	1	DC1~5V	Y	RS-485	I	Synchronize input	V	VMQ(丁基橡膠)	9	Customer
			•L0(Pipe size 0.5 to 4 in)	•Relay contact (AC250V-5A,DC30V-7A)		2	DC4~20mA			T	Synchronize totalizer				
			•L1(Pipe size 6 to 24 in)			9	Customer								

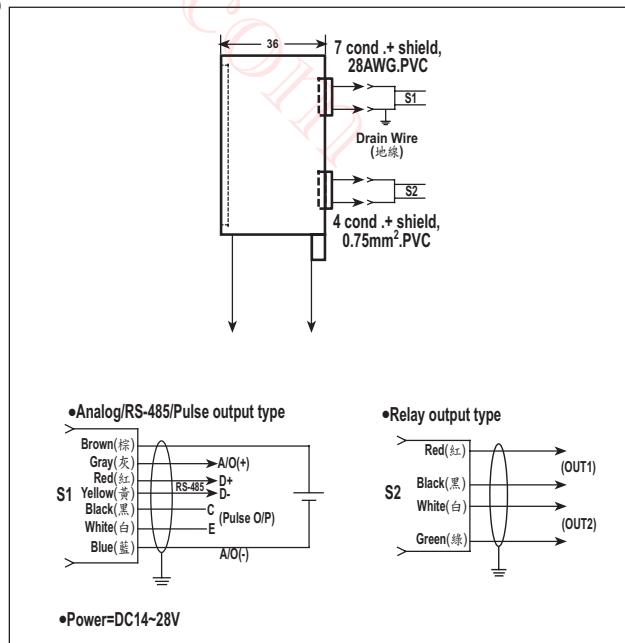
2.SPCIFICATION (主要規格)

- Supply voltage
(電源輸入) : DC 14 to 28V
- Measuring accuracy
(精確度) : $\pm 0.75\%$ F.S.
- Repeatability
(重現性) : $\pm 0.5\%$ F.S.
- Input sampling(output respones) time
(輸入取樣(輸出反應)時間) : 6 cycles/sec.
- Readout (compare) range
(顯示值(比較值)範圍) : 0~99999 adjustable(rate)
0~99999999 adjustable (totalizer)
- Indication (sampling)cycl
(顯示時間週期) : 0.5/1.0/2.5/5.0 S selective
- Relay output mode
(繼電器輸出模式) : HI or Lo adjustable
- Relay contact outp
(繼電器容量) : AC250V-5A,DC30V-7A
- Analog output resolut
(類比輸出解析度) : 16 bit DAC
- Output drive capability
(輸出負載能力) : <10mA for voltage mode
<10V for current mode
"00"~"FF"(0~255)
- RS-485 address
(通訊位址) : 19200/9600/4800/2400 selective
- RS-485 baud rate
(傳輸速率) : Modbus RTU mode
- RS-485 protocol
(通訊協議) : 60.5Hz per m/s nominal,18.45Hz per ft/s nominal
(Max.10Hz(synchronizer totalizer last digit))
- Output frequency
(輸出頻率) : Transistor NPN open-collector(Max.DC60V/100mA)
- Pulse output type
(脈波輸出型態) : Bright red/green LEDS high 10.16mm (0.4")
- Display
(顯示幕) : Touch switches
- Parameter setting
(參數設定方式) : Non-volatile E² PROM memory
- Memory mode
(記憶型式) : Polypropylene or Natural PVDF
- Sensor body material
(感應器本體材質) : PFA + Magnetic
- Rotor material
(轉子材料) : Zirconia ceramic(ZrO₂)(SL-P/V)
- Shaft and bearings material
(軸心與軸承材料) : FKM(viton) or VMQ
- Display housing materials
(顯示器本體材質) : NYLON66+PBT+15%GF(UL94V-0)
- Measuring kinematic viscosity range
(量測動態黏度範圍) : 0.5 to 20 centi stokes (cst)
- Maximum particle matter
(最大雜質顆粒容許) : <10%(particle),<0.5mm²(particle size)°C
- Maximum operating pressure/temperature
(最高使用溫度與壓力) : PP body (180 psi@-20 to 27°C,25 psi@85°C)
PVDF body (200 psi@-30 to 27°C,36 psi@90°C)
- Storage condition
(存放環境條件) : -30 to 80°C (20 to 90RH 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.DIMENSION(unit:mm) (外型尺寸)



4.TERMINAL CONNECTION (接線圖)



微電腦型長度、流量顯示控制錶(24x48mm)

(MICROPROCESS LENGTH, FLOW CONTROLLER METER, 24x48mm)

MODEL
MMCS

CE



■特點(FEATURES)

- 顯示範圍-19999至99999位數(Readout range from -19999 to 99999)
- 最高輸入頻率 10KHz(Accepts input rates up to 10KHz)
- 四種輸入模式可選擇(加算,減算,加減算,90度相位差加減算)
(Four counting modes Up,Down,Up/Down, quadrature can be modified)
- 90度相位差加減算具有提高解析度4倍功能 (Quadrature sensing up to 4 times resolution)
- 輸入脈波具有預設刻度功能(Input scaling multiplied 0.0001 to 9.9999 can be modified)
- 2組警報功能(Two alarm function)(optional)
- 16 BIT 類比輸出功能(15 bit DAC analog output function)(optional)
- 數位RS-485介面(Digit RS-485 interface function)(optional)

1: MODEL:MMCS-□
(選購型號)

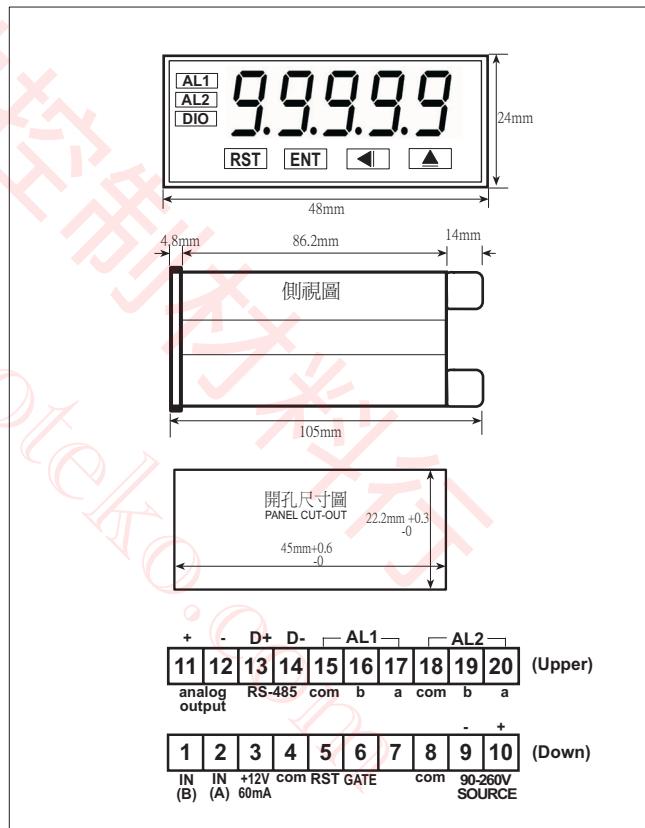
NO	Input Type	NO	Input rates	NO	Counting Mode	NO	Alarm output	NO	Analog output	NO	RS-485	NO	Aux. Power
A	Pulse (TTL) (5V)	1	50 pulse/sec.	1	Up	0	None	N	None	N	None	A	AC/DC18~60V
B	Pulse (NPN) (12V)	2	5000 pulse/sec.	2	Down	1	One	I	DC4~20mA	Y	RS-485	B	AC/DC90~260V
C	Pulse (PNP) (12V)	1:Contact input 2:Non-contact input		3	Up/Down	2	Two	V	DC0~10V			•Modbus mode •256 nodes on bus	
O	SPECIFIED			4	Quadrature			R	SPECIFIED			•Less 4VA for AC/DC input	

2: SPECIFICATION (主要規格)

- Count input type
(脈波輸入型式)
: Jump-pin selectable current sourcing(NPN)
or current sinking (PNP)
- Count input trigger levels
(脈波觸發電位)
: HI bias (CMOS) ($V_{IH}=7.5V$, $V_{IL}=5.5V$)
LO bias (TTL) ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max.count rates
(最高輸入頻率)
: <10KHz (up , down , up/down mode)
<5KHz (quadrature mode)
- Over input indication
(過載顯示)
: " doFL " and " -doFL "
- Readout (compare) range
(顯示值範圍)
: -19999 to 99999 digit 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 (isolating)
- Response time
(輸出反應速度)
: $< 1/f + 10 \text{ ms}$ (0~90%)
- Output drive capability
(輸出負載能力)
: $< 10\text{mA}$ for voltage mode
 $< 10\text{V}$ 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
- Display
(顯示幕)
: Red high efficiency LEDs high 10.16mm (0.4")
- Sensor power supply
(感應器電源)
: 12VDC $\pm 3\%$ (<60mA)
- Memory mode
(記憶方式)
: Non-volatile E² PROM memory
- Dielectric strength
(絕緣耐壓能力)
: 2KVac/1 min. (input/output/power)
1600Vdc (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)



微電腦型轉速、線速錶,24x48mm(Low Power)

(MICROPROCESS RPM & LINE-SPEED METER,24x48mm(Low Power))

MODEL
MR24

CE



■特點(FEATURES)

- 精確度0.01%滿刻度 (Accuracy 0.01% F.S.)
- 最大輸入頻率 50KHz(Accepts input rates up to 50KHz)
- 轉速、線速可任意設定(Display type of RPM or line-speed can be modified)
- 線速單位 米, 英呎, 碼/分鐘可任意設定(Display unit M/min, Y/min, ft/min can be modified)
- 感應器輸入脈波數(1~99999)可任意設定(Input pulse of revolution can be modified (1~99999))
- 尺寸小(24x48x48.5mm),穩定性高(Dimension small (24x48x48.5mm) and High stability)
- 分離式端子,配線容易(Discrete terminal, connector easy)
- CE 認證(CE EMC certification)

1: MODEL:MR24-□ □ □ (選購型號)

NO	Input Type (Exciting)	NO	Input Rates	NO	Aux.Power	NO	Aux.Power
A	Pulse (TTL) (DC5V)	1	50 Hz	A	DC5V(Non-isolating)	E	AC/DC20~260V (Isolating)
B	Pulse (NPN) (DC12V)	2	50KHz	B	DC5V(Isolating)		
C	Pulse (PNP) (DC12V)	1:Contact input 2:Non-contact input		C	DC12V(Non-isolating)	• DC Power ±10%	
O	SPECIFIED			D	DC12V(Isolating)	• Less 0.75VA for input	

2: SPECIFICATION (主要規格)

- Measuring accuracy : 0.01% F.S. (23±5°C)
(精確度)
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels : High level:ViH=4~30V(Pulse)
Low level:ViL=0~2V(Pulse)
- Maximum count rates : 50KHz (50% duty cycle)
- Sampling time : 10 cycles/sec. (>10Hz)
f cycles/sec. (<10Hz)
- Over input indication : " doFL "
- Readout range : 0~99999 digit adjustable
- Diameter setting : 0~9.9999M (Touch switches setting)
- Display : Bright Red LEDs high 8.6mm (0.338")
- Parameter setting : Touch switches
- Sensor power supply : 5VDC±10%(<40mA)
12VDC±10%(<40mA)
- Memory mode : Non-volatile E² PROM memory
- Insulation resistance : >100Mohm with 500Vdc (input/power)
- Dielectric strength : 1.0KVac/1 min. (input/power)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
- Outside dimension : 24x48x48.5mm
- Case material : ABS
- 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

3: OUTSIDE DIMENSION AND CONNECTION DIAGRAM

(外型尺寸與開孔尺寸與配線圖)

