

# 微電腦型脈波輸入瞬間量, 累積量 (9位數) 顯示控制電錶

( MICROPROCESS 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 (Programable 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 form 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)(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劃調整可任意規劃(0.00001至9999.99999) (Programable 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- (選購型號)

- X X=0(none-pulse output) X=P(1 pulse/conut output)(Pulse output only one-alarm)

NO	Input type	NO	Input type	NO	Input type	NO	Input rates	NO	Alarm	NO	Analog output	NO	RS-485 output	NO	Aux. Power
A	Pulse(TTL)(5V)	D	Magnetic pick-up (AC50mV-1.5V)	F	AC-2-60V	1	50 pulse/sec	0	Non-alarm	N	None	N	None	A	AC/DC 18-60V
B	Pulse(NPN)(12V)	O	SPECIFIED			2	5000 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		Modbus RTU mode 256 nodes on bus		Less 5VA for AC/DC input
										T	DC4-20mA				

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

### 2. SPECIFICATION (主要規格)

- Measuring accuracy (精確度) : 0.03% F.S.(rate) (23 ± 5 )
- Count input type (脈波輸入型式) : Switch selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels (脈波動作電位) : HI bias (CMOS) (V<sub>IH</sub>=7.5V, V<sub>IL</sub>=5.5V) Lo bias (TTL) (V<sub>IH</sub>=3.7V, V<sub>IL</sub>=2.0V)
- Max. count rates (最高輸入頻率) : <10KHz (50% duty cycle)(pulse) <10KHz (magnetic pick-up)
- Sampling time (取樣時間) : 10 cycles/sec. (>10Hz)(rate) f cycle/sec. (<10Hz)(rate)
- Readout (compare) range (顯示值(比較值)範圍) : 0-19999 adjustable(rate) 0-999999999 adjustable (totalizer)
- 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 (反應速度) : < 1/f + 10ms (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 baud rate (傳輸速率) : 19200/9600/4800/2400 selective
- RS-485 address (通訊位址) : "01"-"FF"
- Display (顯示幕) : Red high efficiency LEDs high 10.16 mm (0.4")
- Memory mode (記憶方式) : Non-volatile E<sup>2</sup> 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 (20 to 90% RH non-condensed)
- Storage condition (存放環境條件) : 0-70 (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)

