

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

**MODEL  
MMR**



## ( FEATURES )

- (Accuracy 0.03% F.S.)
- (Measuring Pulse(TTL,CMOS), Magnetic pick-up signal)
- (Accepts input rates up to 50KHz)
- (Display type of RPM or line-speed can be modified)
- (Input pulse of revolution can be modified (1-99999pulse/revolution))
- (Two alarm function)(optional)
- (Multiplier bank analog output function)
- (15 bit DAC analog output function)(optional)
- (Digit RS-485 interface function)(optional)

## 1:MODEL:MMR-

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			Less 4VA for AC/DC input
D	Magnetic pick-up(50mV-1.5V)			4	f t/min		Relay contact (AC250V-3A,DC30V-5A)	R	SPECIFIED				
				9	SPECIFIED				input/output isolating				

## 2:SPECIFICATION

- Measuring accuracy : 0.03% F.S. (23 ± 5 )
- Count input type : Jump-pin selectable current sourcing(NPN) or current sinking (PNP)
- Count input trigger levels : 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 : 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-3A, DC 30V-5A
- Analog output resolution : 15 bit DAC (isolating)
- Response time : < 250ms(0-90%)
- Output drive capability : < 10mA for voltage mode  
< 10V for current mode
- Output ripple (p-p) : < 0.1% F.S.
- RS-485 adress : "01"- "FF"
- RS-485 baud rate : 19200/9600/4800/2400 selective
- RS-485 protocol : Modbus RTU mode
- Display : Red high efficiency LEDs high 14.22mm (.56")
- Parameter setting : Touch switches
- Sensor power supply : 12VDC ± 3%(<60mA)
- Memory mode : Non-volatile E<sup>2</sup> PROM memory
- Dielectric strength : 2KVac/1 min. (input/power/display)  
1600Vdc (input/output)
- Operating condition : 0-50 (20 to 90% RH non-condensed)
- Storage condition : 0-70 (20 to 90% RH non-condensed)

## 3:OUTSIDE DIMENSION AND CONNECTION DIAGRAM

