

# MICROPROCESS AC POWER CONTROLLER METER

**MODEL  
MMP**



## FEATURES

- Accuracy 0.25% F.S.  $\pm 1$  digit
- Measuring watt/var/power factor/phase angle
- Programmable rate 0 to  $\pm 19999$  digit
- Dielectric strength 2KVac/1 min.(input/output/power)
- Surage test 4KV(1.2x50us)
- Dual alarm function (Optional)
- 15 bit DAC analog output function (Optional)
- Digit RS-485 interface function (Optional)

## 1.MODEL:MMP-

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	1 $\phi$ 2W	1	0-120V	1	0-1A	A	50Hz	0	None	N	None	N	None	A	AC/DC18-60V
V	Var	3	3 $\phi$ 3W	2	0-240V	2	0-5A	B	60Hz	1	One	I	DC4-20mA	Y	RS-485	B	AC/DC90-260V
F	Power Factor	4	3 $\phi$ 4W	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 $\pm 30\%$				Frequency $\pm 10\%$			R	SPECIFIED				

## 2.SPECIFICATION

- Measuring accuracy : 0.25% F.S.(Watt, Var, phase angle)  
(23  $\pm 5$  )  
0.25% F.S.  $\pm 0.25^\circ$ (Power Factor)  
(-300~+.300)
- Input burden : <0.2VA (Voltage)  
<0.2VA (Current)
- Maximum input over : Current related input: 3 x rated continuous  
Voltage related input: maximum 2 x rated continuous
- Over input indication : "doFL" or "-doFL"
- Readou range : 0-  $\pm 19999$  digit adjustable
- Alarm action : HI or Lo adjustable
- Relay contact output : AC 250V-5A, DC 30V-7A
- Analog output resolution : 15 bit DAC
- 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"
- RS-485 baud rate : 19200/9600/4800/2400 selective
- RS-485 protocol : Modbus RTU mode
- Temp. coefficient : 100ppm/ (0-50 )
- Display : Red high efficiency LEDs high 14.22mm(.56")
- Parameter setting : Touch switches
- Memory mode : Non-volatile E<sup>2</sup> PROM memory
- Dielectric strength : 2KVac/1 min. (input/output/power)
- Surge test : ANSI c37.90a/1974,DIN-IEC 255-4  
impulse voltage 4KV(1.2x50us)
- Operating condition : 0-50 (20 to 90% RH non-condensed)
- Storage condition : 0-70 (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

