

# MICROPROCESS WATT/WATTHOUR(VAR/VARHOUR) CONTROLLER METER

MODEL MPH



## FEATURES

- Accuracy 0.25%F.S. ± 1digit
- Programmable rate 0 to 19999 digit (rate),0 to 999999999 digit (totalizer)
- Programmable rate 0 to 19999 digit
- Programmable scale factor (0.00001 to 9999.99999 )(totalizer)
- Dielectric strength 2KVac/1 min.(input/output/power)
- Surage test 4KV(1.2x50us)
- Dual alarm function (Optional)
- 15 bit DAC isolating analog output function (Optional)
- Digit RS-485 interface function (Optional)
- Digit pulse output function (Optional)

## 1.MODEL:MPH-

NO	Input Type	NO	Input unit	NO	Input Voltage	NO	Input Current	NO	Input Frequnce	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/DC 18-60V
	Watthour	3	3φ3W	2	0-240V	2	0-5A	B	60Hz	1	One	I	DC4-20mA	Y	RS-485	Y	1pulse/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 (30Vdc,<40mA)		Less 5VA for AC/DC input
	Varhour	9	SPECIFIED		Voltage ± 30%				Frequency ± 10%		Pulse output only one alarm	R	SPECIFIED	T	DC4-20mA				

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

## 2.SPECIFICATION

- Measuring accuracy : 0.25% F.S. ± 1 digit (rate) (23 ± 5 )
- Over input indication : " doFL " or "-doFL"
- Readout (compare) range : 0-19999 adjustable(rate)  
0-999999999 adjustable (totalizer)
- 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 baud rate : 19200/9600/4800/2400 selective
- RS-485 address : "01"- "FF"
- RS-485 protocol : Modbus RTU mode
- Temp. coefficient : 100ppm/ (0-50 )
- Display : Red high efficiency LEDs high 10.16 mm(0.4")
- Parameter setting : Touch switches
- Memory mode : Non-volatile E<sup>2</sup> PROM memory
- Dielectric strength : 2KVac/1 min. (input/output/power)  
1600 Vdc (input/output)
- 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

