

# MICROPROCESS FREQUENCY TRANSMITTER



## FEATURES

- Accuracy 0.02% F.S.
- Input ranges from 0.01 Hz to 80 KHz
- 15 bit DAC analog voltage or current mode can be modified
- Decimal point can be modified
- Input pulse cut off sampling time (0.1~99.9) second can be modified
- Display value depend on the mean input pulse several times can be modified (1 to 9 times)

1. MODEL: PF-MF- [Color] - [Min.] - [Max.] [Hz] - [N] → (Non-programmable)  
(Input Range)

NO	Input Type	NO	Output Ranges	NO	Aux. Power
1	Pulse (TTL) (5V)	B	0-1 V	1	AC 110V (50/60Hz)
2	Pulse (NPN) (12V)	E	0-5 V	2	AC 220V (50/60Hz)
3	Pulse (PNP) (12V)	F	1-5 V	3	DC 24V
4	AC 0.1-6V	H	0-10 V	4	DC 48V
5	AC 1-60V	I	2-10 V	5	DC 110V
9	SPECIFIED	J	0-1 mA	6	DC 220V
		N	0-10mA	7	AC 90~260V
		P	0-20 mA	9	SPECIFIED
		Q	4-20 mA		
		R	SPECIFIED		

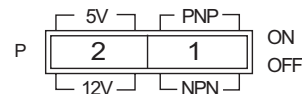
• ±20% of rate, less 3.5VA for AC input  
• ±20% of rate, less 3WATT for DC input  
• Switchable 110V/220V by jump internally  
• ±10% of rate, less 3.5VA for AC switching input

## 2. Specification

- Accuracy : 0.02% F.S. (23±5°C)
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable  
Hi bias ( $V_{IH}=7.5V$ ,  $V_{IL}=5.5V$ ) or  
Lo bias ( $V_{IH}=3.7V$ ,  $V_{IL}=2.0V$ )
- Sampling time : 10 cycle/sec. ( $\geq 10Hz$ )  
f cycle/sec. ( $< 10Hz$ )
- Over input indication : "ovEr"
- Readout (output) range : "0" to "99999" adjustable
- Sensor power supply : 12VDC ±10% ( $\leq 50mA$ )
- Output drive capability :  $\leq 10mA$  for voltage mode  
 $\leq 10V$  for current mode
- Output ripple (p-p) :  $< 0.1\%$  F.S.
- Response time :  $\leq 200ms$  (0~90%) ( $\geq 10Hz$ )
- Temp. coefficient : 50 ppm/°C (0-50°C)
- Dielectric strength : 1.5kVac/1 min. (power/input/output)  
2000 Vdc (input/output)
- Operating condition : 0~55°C (20~95% RH non-condensed)
- Storage condition : 0~70°C (20~95% RH non-condensed)
- Construction : Socket/plug-in type with barrier terminals

## 3. Function switches (S1, S2)

- S1 → P1 input trigger level selection  
P2 input level selection

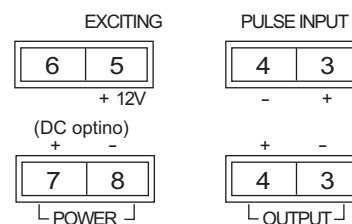


- S2 → P1-P2-P3-P4-P5-P6 output range selection

P7-P8 output mode: voltage/current selection

X	Output Range	O/P Range	
		1-2-3-4-5-6	7-8
0	SPECIFIED	switching status on=1 off=0	
1	0 ~ 1V	1-0-1-1-1-0	1-1
2	0 ~ 5V	1-0-1-0-1-0	1-1
3	1 ~ 5V	1-1-1-0-1-1	1-1
4	0 ~ 10V	1-1-0-1-0-0	1-1
5	2 ~ 10V	1-1-1-1-0-1	1-1
6	0 ~ 1mA	0-1-1-1-1-0	0-0
7	0 ~ 10mA	1-0-1-0-1-0	0-0
8	0 ~ 20mA	1-1-0-1-0-0	0-0
9	4 ~ 20mA	1-1-1-1-0-1	0-0

## 4. Terminal connection



## 5. Dimension: See other transmitter dimension

## 6. Application

Example 1 : PF-MF-2Q2-0-1000.0Hz

Input range ..... (0-1000.0Hz)  
Input level ..... (pulse (NPN))  
Output range ..... (DC 4-20mA)  
Power ..... (AC 220V)

Example 2 : PF-MF-1H1-1000.0-100.0Hz

Input range ..... (1000.0-100.0Hz)  
Input level ..... (pulse (TTL))  
Output range ..... (DC 0-10V)  
Power ..... (AC 110V)