

# DC TO FREQUENCY TRANSMITTER

# MT-DF

## FEATURE

- 4 popular Input and 8 Output Ranges Programmable in One
- Dual isolated output is available
- CE Approved

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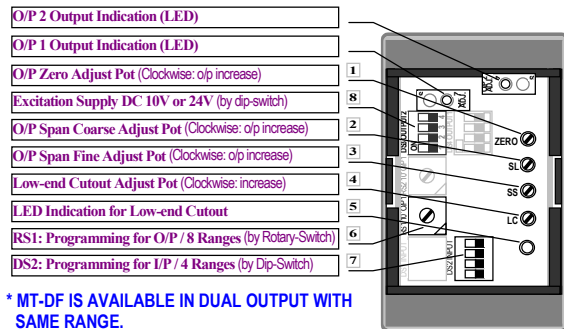
## SPECIFICATION

Input Range	Input Impedanc	Output Range	Output Mode
0 ~ 10 mV	≧ 1M ohm	0 ~ 78.1 Hz	Open collect: 30Vdc; 40mA 0 ~ 50K Hz maximum Pulse width: 50% duty cycle
0 ~ 50 mV	≧ 1M ohm	0 ~ 156.3 Hz	
0 ~ 1 V	≧ 1M ohm	0 ~ 315.2 Hz	
0 ~ 5 V	≧ 1M ohm	0 ~ 625 Hz	
0 ~ 10 V	≧ 1M ohm	0 ~ 1.25K Hz	Voltage pulse: 5V, 12V, 24V(Specify); 10mA 0 ~ 50K Hz maximum Pulse width: 50% duty cycle
1 ~ 5 V	≧ 1M ohm	0 ~ 2.5K Hz	
2 ~ 10 V	≧ 1M ohm	0 ~ 5K Hz	
-10 ~ 0 ~ +10 V	≧ 1M ohm	0 ~ 10K Hz	
0 ~ 1 mA	≧ 100 ohm	0 ~ 20K Hz	Mech. Contact: 110Vac; 1A 0~130 pulse/minute maximum; On pulse width: 50% duty cycle
0 ~ 10 mA	≧ 20 ohm	0 ~ 50K Hz	
0 ~ 20 mA	≧ 10 ohm		
4 ~ 20 mA	≧ 10 ohm		

- Accuracy: ±0.1% of R.O.
- Response time: ≧ 250 msec. Plus one pulse cycle
- Coarse Span adjustment: ≧ 50% of R.O.
- Fine Span adjustment: ≧ 1% of R.O.
- Zero adjustment: ≧ 5% of R.O.
- Low-end cutout adjustment: 0 ~ 10%; a red LED assists in adjusting the Cutout point; turns on during the cutout
- Output range adjustment: Changeable by rotary switch on top and fine Tune with dual span adjust pot
- Option range: Ultra-low frequency: 0 ~ 0.1 Hz  
Ultra-high frequency: 0 ~ 50K Hz
- Excitation supply: DC 10V/24V, 40mA; Changeable by dip switch
- Dual output: Available when excitation supply was removed
- Voltage Output level: 5Vp, 12Vp, 24Vp specify
- Power Supply: AC 115 or 230V ±10%, 50/60 Hz  
Changeable by jumper inside  
Option: DC 12V, 24V, 48V ±10%, (Isolated)
- Power consumption: DC 5W, AC 6.5VA
- Operating temperature: 0~60 °C
- Operating relative humidity: 20~95 %RH
- Temperature coefficient: ≧ 100 PPM/°C
- Storage temperature: -10~70 °C
- Isolation: Between Power / Input / Output1 / Output2
- Insulation resistance: ≧ 100M ohm at 500Vdc
- Surge test: 4 KV, 1.2 x 50 μs sec.
- Dielectric Strength: Common mode & differential mode  
AC 2.0 KV for 1 min  
Between Power / Input / Output / Case

- Standard: Comply with EN50081-1, EN50082-2
- Dimensions: 50mm(W) x 87mm(H) x 123mm(D)-with socket
- Mounting: Surface and DIN rail 35mm WIDE
- Weight: 500g

## ADJUSTMENT

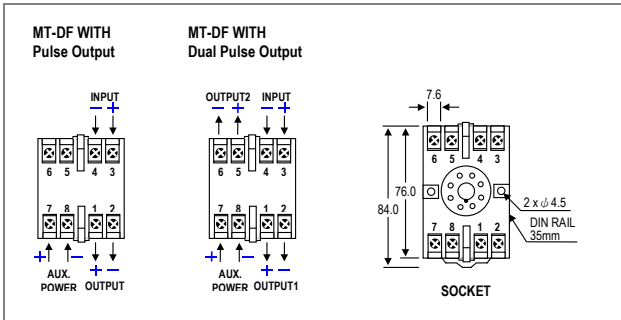


\* MT-DF IS AVAILABLE IN DUAL OUTPUT WITH SAME RANGE.

### PROGRAMMING FOR INPUT AND OUTPUT:

INPUT RANGE	DS2(7)	OUTPUT SIGNAL	OUTPUT RS1(6)	EXCIT. SUPPLY	OUTPUT DS3(8)
1 ~ 5 V		0 ~ 78.1 Hz 0 ~ 156.3 Hz	7 6	10 V	
0 ~ 10 V		0 ~ 315.2 Hz 0 ~ 625 Hz	5 4	24 V	
0 ~ 20 mA		0 ~ 1.25K Hz 0 ~ 2.5K Hz	3 2		
4 ~ 20 mA		0 ~ 5K Hz 0 ~ 10K Hz	1 0		

## CONNECTION DIAGRAM & SOCKET



## ORDER INFORMATION

Calibrated in factory accord order. Unit opened by customer

for re-program may loose the guarantee.

MT-DF		Output Loop	Input Range	Output1 Range	Output2 Range	Output Mode	Aux. Power				
CODE	OUTPUT LOOP	CODE	INPUT	CODE	INPUT	CODE	OUTPUT	CODE	O/P MODE	CODE	AUX. POWER
1	Single Output	A1	0 ~ 100 μA	V1	0 ~ 10 mV	P	1	0 ~ 0.1Hz	OC	A1	AC 115 V
2	Dual Output	A2	0 ~ 1 mA	V2	0 ~ 50 mV	P Programmable 8 Ranges: 0~78.1 Hz to 0~10K Hz	2	0 ~ 1 Hz	MC	A2	AC 230 V
		A3	0 ~ 10 mA	V3	0 ~ 100 mV		3	0 ~ 10 Hz	V	D12	DC 12 V
		A4	0 ~ 20 mA	V4	0 ~ 1 V		4	0 ~ 50 Hz	05	D24	DC 24 V
		A5	4 ~ 20 mA	V5	0 ~ 5 V		5	0 ~ 20K Hz	12	D48	DC 48 V
		P Programmable 4 Ranges: 1~5V/0~10V 0~20mA/4~20mA		V6	0 ~ 10 V	E Excitation N None O Specify	6	0 ~ 50K Hz	24	O	Specify
				V7	1 ~ 5 V						
				V8	2 ~ 10 V						
				V9	-10 ~ +10 V						
		O	Specify								

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