

# MT-DF DC to FREQUENCY Converter & Isolator

## FEATURE

- 4 popular Input and 8 Output Ranges Programmable by dip switches
- Dual isolated output is available
- Low cost and high stability



## SPECIFICATION

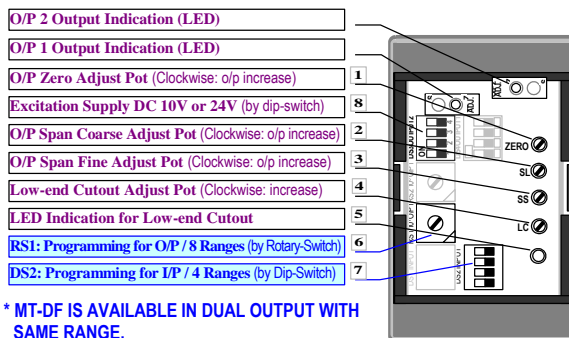
Input Range	Input Impedance	Output Range	Output Mode
0 ~ 10 mV	≧ 1MΩ	0 ~ 78.1 Hz	Open collect: 30Vdc; 40mA 0 ~ 50K Hz maximum Pulse width: 50% duty cycle
0 ~ 50 mV	≧ 1MΩ	0 ~ 156.3 Hz	
0 ~ 1 V	≧ 1MΩ	0 ~ 315.2 Hz	
0 ~ 5 V	≧ 1MΩ	0 ~ 625 Hz	Voltage pulse: 5V, 12V, 24V(Specify); 10mA 0 ~ 50K Hz maximum Pulse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

- Accuracy:** ±0.1% of F.S.  
**Response time:** ≤ 250 mS Plus one pulse cycle  
**Coarse Span adjustment:** ≤ 50% of F.S.  
**Fine Span adjustment:** ≤ 1% of F.S.  
**Zero adjustment:** ≤ 5% of F.S.  
**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  
**Voltage Output level:** 5Vp, 12Vp, 24Vp specify  
**Power Supply:** AC 115 or 230V ±10%, 50/60 Hz  
**Excitation supply:** DC 10V/24V, 40mA  
**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  
**Insulation resistance:** ≥ 100MΩ @500Vdc  
**Surge test:** 4 KV, 1.2 x 50 μ S  
**Dielectric Strength:** AC 2KV, 50/60Hz, 1 min.  
 Between Power / Input / Output / Case

**Dimensions:** 51mm(W) x 122.5(H) x 84.5(D) -with socket  
**Mounting:** Surface and DIN rail 35mm WIDE  
**Weight:** 600g

## ADJUSTMENT

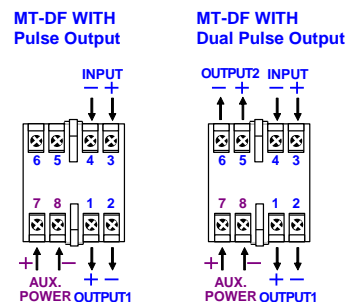


\* MT-DF IS AVAILABLE IN DUAL OUTPUT WITH SAME RANGE.

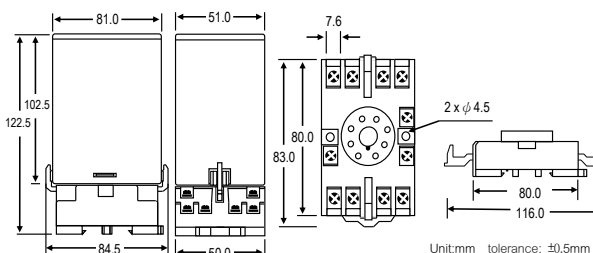
PROGRAMMING FOR INPUT AND OUTPUT:

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

## CONNECTION DIAGRAM

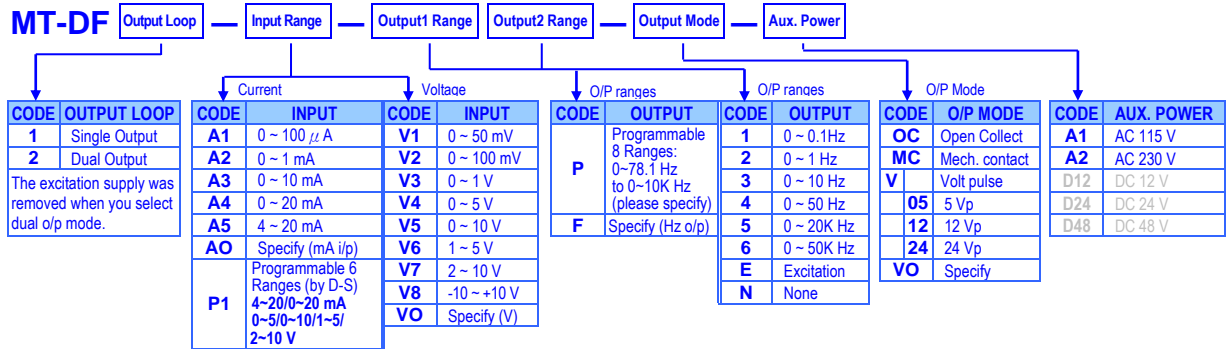


## DIMENSIONS



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## ORDERING INFORMATION



**Remark:** ➤ When you select coding P1 or P for input and output range, please specify initial range.  
➤ After change input or output range by dip or rotary switches (D-S or R-S), re-calibration is to be requested.