

MT-FD FREQUENCY Converter & Isolator **ADTEK**

FEATURE

- 10 popular Inputs and 4 popular Output (Programmable by dip switches) Ranges
- Modular Design, Easy Maintain and Save Stock;
- Changeable Output Module Between V/mA, Trip Relay with difference programming module
- Dual difference signal output available even for trip relay
- Low cost & high stability
- Design by CE standard



SPECIFICATION

Input Range	Input Impedance	Output Range	Load Resistance
0 ~ 0.1 Hz	≥ 1MΩ	0 ~ 100 mV	≥ 100KΩ
0 ~ 1 Hz	≥ 1MΩ	0 ~ 1 V	≥ 100Ω
0 ~ 10 Hz	≥ 1MΩ	0 ~ 5 V	≥ 500Ω
0 ~ 20 Hz	≥ 1MΩ	0 ~ 10 V	≥ 1KΩ
0 ~ 50 Hz	≥ 1MΩ	1 ~ 5 V	≥ 500Ω
0 ~ 100 Hz	≥ 1MΩ	-10 ~ 0 ~ +10 V	≥ 10KΩ
0 ~ 200 Hz	≥ 1MΩ	0 ~ 1 mA	≤ 7.5KΩ
0 ~ 500 Hz	≥ 1MΩ	0 ~ 10 mA	≤ 750Ω
0 ~ 1K Hz	≥ 1MΩ	0 ~ 20 mA	≤ 500Ω
0 ~ 2K Hz	≥ 1MΩ	4 ~ 20 mA	≤ 500Ω
0 ~ 5K Hz	≥ 1MΩ		
0 ~ 10K Hz	≥ 1MΩ		
0 ~ 20K Hz	≥ 1MΩ		
0 ~ 50K Hz	≥ 1MΩ		

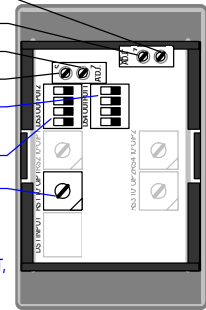
Accuracy: ±0.1% of F.S.
Response time: ≤ 250 mS. Plus one pulse cycle
Span adjustment: ≤ 10% of F.S.
Zero adjustment: ≤ 5% of F.S.
Input mode: Voltage pulse, Open collector, Mechanical contact (30 Hz max)
Pulse width: 10 mS min @ < 20 Hz
Duty ratio 20 ~ 80% at > 20 Hz
Input level: 5Vp/12Vp/24Vp/220Vac
Output ripple: ≤ 0.1% of F.S.
Power Supply: AC 115 or 230V ±10%, 50/60 Hz
Excitation supply: DC 10V/24V, 40mA
Power consumption: DC 5W, AC 6.5VA

Option range: Ultra-low frequency: 0 ~ 0.1 Hz
Ultra-high frequency: 0 ~ 50K/100K Hz
Relay contact: AC 110V/5A, 220V/2A, Normal Open
Operating temperature: 0~60 °C
Operating relative humidity: 20~95 %RH, non-condensing
Temperature coefficient: ≤ 100 PPM/°C
Storage temperature: -10~70 °C
Insulation resistance: ≥ 100MΩ @500Vdc
Surge test: 4 KV, 1.2 x 50 μS
Dielectric Strength: AC 2KV, 50/60Hz, 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: 600g

ADJUSTMENT

- O/P 2 Span Adjust Pot (Clockwise: o/p2 increase)
- O/P 2 Zero Adjust Pot (Clockwise: o/p2 increase)
- O/P 1 Zero Adjust Pot (Clockwise: o/p1 increase)
- O/P 1 Span Adjust Pot (Clockwise: o/p1 increase)
- DS4: Programming for O/P 1 / 4 Ranges (by Dip-Switch)
- DS3: Programming for O/P 2 / 4 Ranges (by Dip-Switch) or selecting for excitation supply / 2 Ranges (DC 24V: Dip-Switch 1&2 ON; DC 10V: Dip-Switch 3&4 ON)
- RS1: Programming for I/P / 10 Ranges (Rotary-Switch)

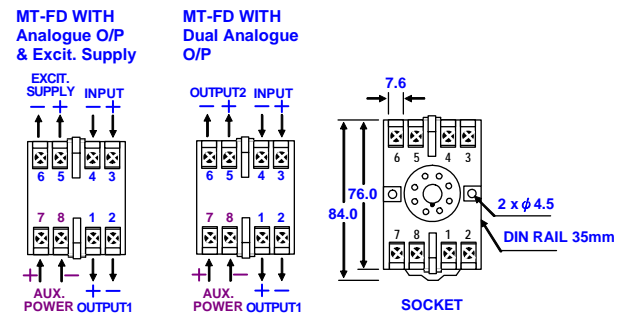


* MT-FD IS ONLY SINGLE OUTPUT WITH EXCITATION SUPPLY. IT COULD BE SPECIFIED IN DUAL OUTPUT, WHEN EXCITATION SUPPLY WAS REMOVED.

PROGRAMMING FOR INPUT AND OUTPUT:

INPUT RANGE		RS1 (7)	OUTPUT SIGNAL	O/P1 DS4 (5)	O/P2 DS3 (6)
J1 Close	J1 Open				
0 ~ 1 Hz	0 ~ 10 Hz	0	1 ~ 5 V	[DIP SW]	[DIP SW]
0 ~ 2 Hz	0 ~ 20 Hz	1		[DIP SW]	[DIP SW]
0 ~ 5 Hz	0 ~ 50 Hz	2		[DIP SW]	[DIP SW]
0 ~ 10 Hz	0 ~ 100 Hz	3	0 ~ 10 V	[DIP SW]	[DIP SW]
0 ~ 20 Hz	0 ~ 200 Hz	4		[DIP SW]	[DIP SW]
0 ~ 50 Hz	0 ~ 500 Hz	5	0 ~ 20 mA	[DIP SW]	[DIP SW]
0 ~ 100 Hz	0 ~ 1K Hz	6		[DIP SW]	[DIP SW]
0 ~ 200 Hz	0 ~ 2K Hz	7	4 ~ 20 mA	[DIP SW]	[DIP SW]
0 ~ 500 Hz	0 ~ 5K Hz	8		[DIP SW]	[DIP SW]

CONNECTION DIAGRAM & SOCKET



ORDERING INFORMATION

Remark: ▶ When you select coding P0, P1 or P for input and output range, please specify initial range.
▶ After change input or output range by rotary or dip switches (R-S or D-S), re-calibration is to be requested.

