

**INTRODUCTION**

The 2100543 TFIO Module is a configurable 8-point digital I/O module. Each point can be configured to be either an input and/or output. All points are always inputs; however, if the output is activated the input will be held steady state. The module also maintains a 16-bit accumulator for each input; thus allowing any point to be used as a pulse accumulator.

**POINT SPECIFICATIONS**

**Electrical (each point):**

- Open circuit voltage: 5VDC (Internally pulled up to 5VDC)
- Short circuit leakage current: -430uA typical.
- Input capacitance: 1000pF typical.
- Maximum allowable voltage range on input: 0.5VDC to 26.5VDC.

**Digital Input:**

- Dry Contact or voltage type
- Minimum contact resistance to activate input 150KΩ
- Maximum voltage to activate the input: 3.8V, referenced to GND terminal
- Minimum voltage to deactivate the input: 4.75V, referenced to GND terminal

**Digital Output:**

- Open Drain FET
- RDS(ON): 0.060Ω Typical.
- Maximum continuous sink current: 2A @ 24VDC

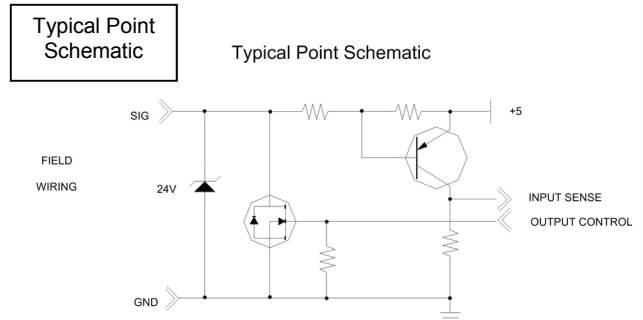
**Pulse Input:**

- Maximum input frequency: 2850Hz @ 50% duty cycle.
- Minimum high or low period: 175uS

**WIRING REQUIREMENTS**

When digital outputs are used to sink current, the sum total sink current for all points and modules should not exceed 5A total. If more than 5A are required, separate ground wires from module output ground to power source ground terminal (bus bar) are required. Failure to do so may cause erratic system operation. Sufficient gauge wire should be used to handle total load current.

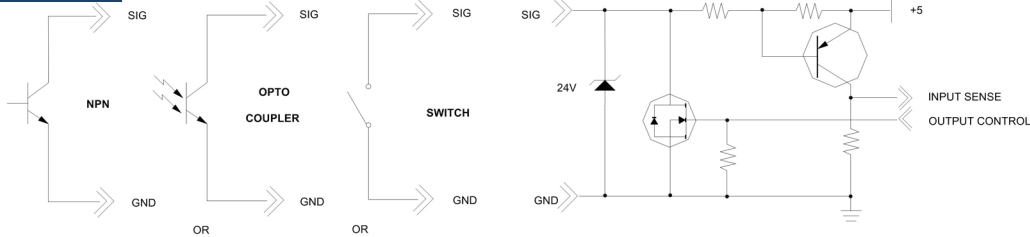
Use shielded pair or twisted pair conductors to reduce the possibility of erroneous transitions on the inputs in high EMI/RFI environments. (Ground the shield at field device).



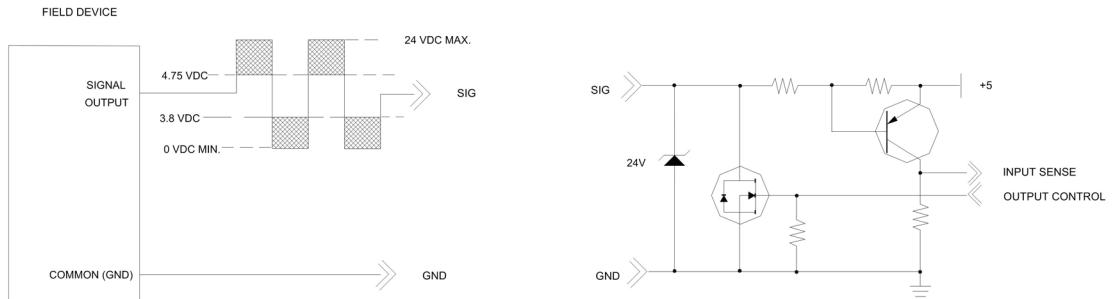
TFIO Digital Input/Digital Output Module Pin Designation				
	J1	J2	J3	J4
1	POINT 1 SIG	POINT 3 SIG	POINT 5 SIG	POINT 7 SIG
2	POINT 1 GND	POINT 3 GND	POINT 5 GND	POINT 7 GND
3	POINT 2 SIG	POINT 4 SIG	POINT 6 SIG	POINT 8 SIG
4	POINT 2 GND	POINT 4 GND	POINT 6 GND	POINT 8 GND

Example Connections

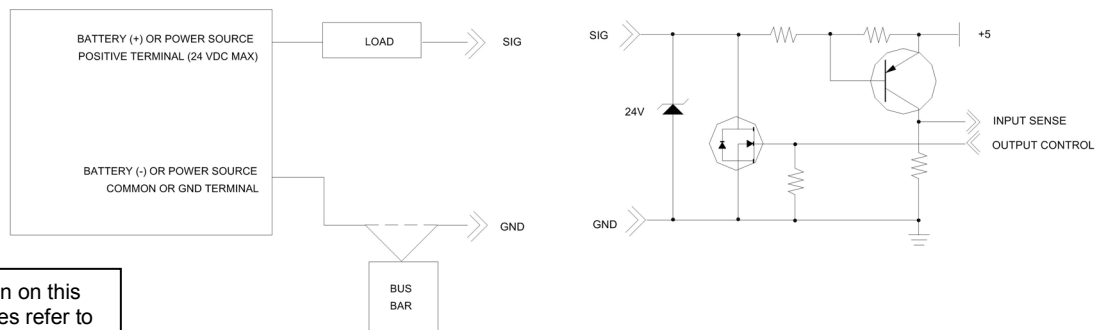
POINT CONNECTIONS



TYPICAL VOLTAGE INPUT FIELD



TYPICAL OUTPUT FIELD WIRING



For further information on this and other TFIO modules refer to the User Manual.

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