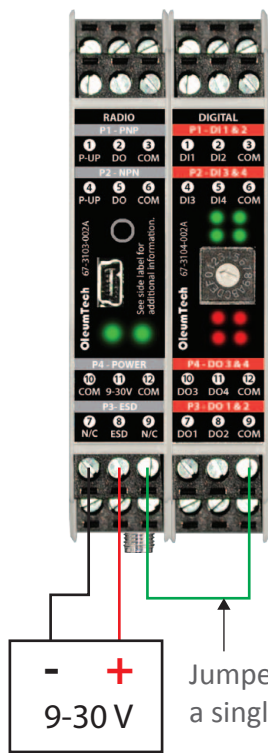


## 1. Isolation vs Non-Isolation



If isolation is required, then separate power sources are required for Radio Module and I/O Module(s).

If isolation is not required, a jumper is required to make common with Radio Module's power supply to one of I/O Module's COM pin.

## 2. Power Consumption

TYPE	POWER CONSUMPTION
RADIO	35 mA @ 12 Vdc AVG (10% Duty Cycle)
DIGITAL	26 mA @ 12 Vdc MAX
4-20 mA	83 mA @ 12 Vdc MAX
0-10 V	58 mA @ 12 Vdc MAX



All inputs and outputs on I/O Modules provide field isolation. Please wire accordingly.

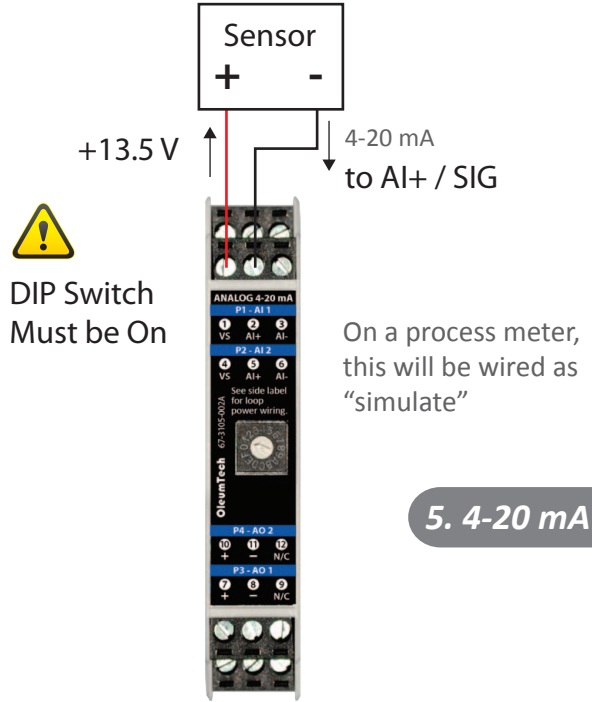


Always disconnect power when attaching or detaching I/O Module(s) to or from DataRail to avoid damage.

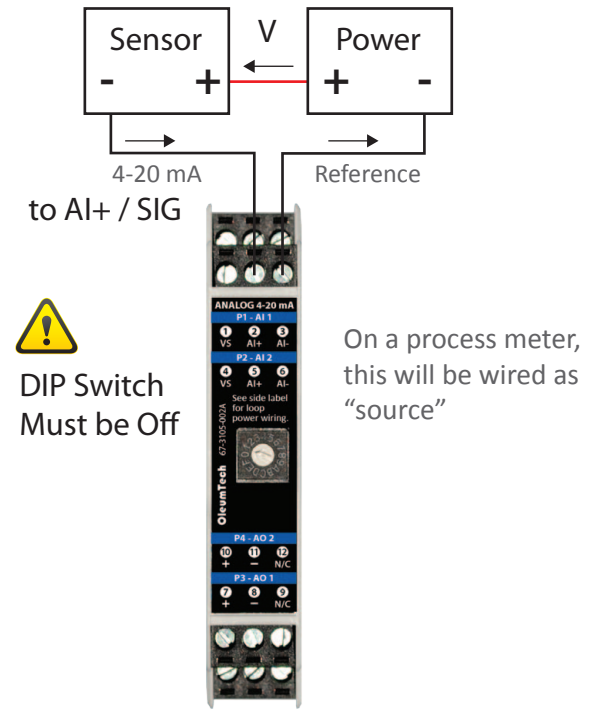
# WIO<sup>®</sup> System Wiring Diagrams for Radio Kit RM1K

APPLICATION DRAWING

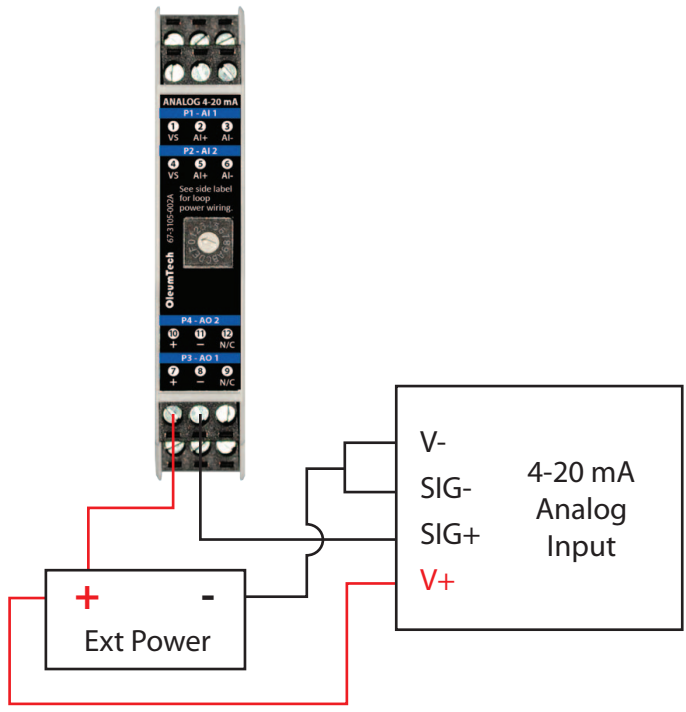
### 3. 4-20 mA Input - Internal Power Loop



### 4. 4-20 mA Input - External Power Loop

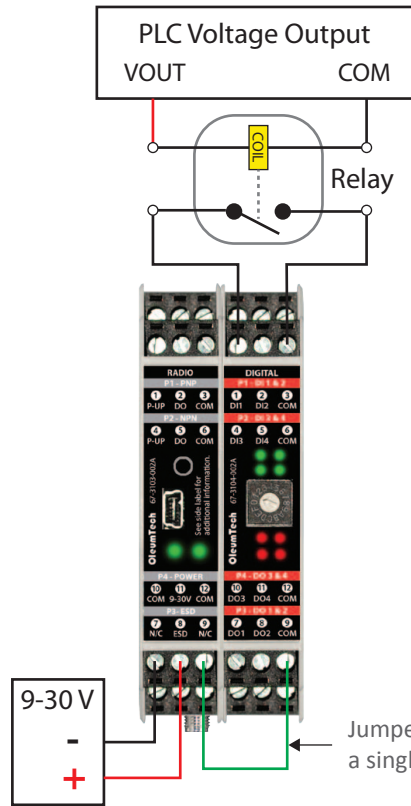


### 5. 4-20 mA Output



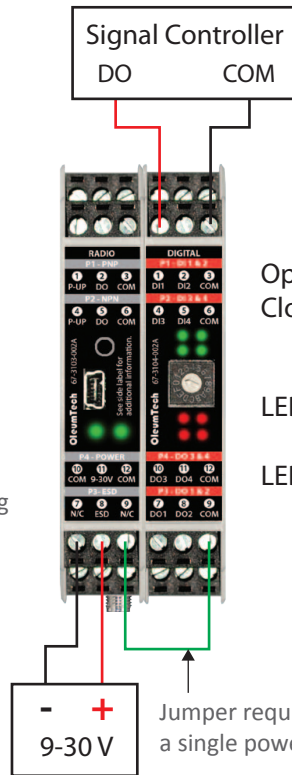
# WIO<sup>®</sup> System Wiring Diagrams for Radio Kit RM1K

## 6. Digital Level Input - Active High



Jumper required if using a single power source.

## 7. Digital Level Input - Active Low



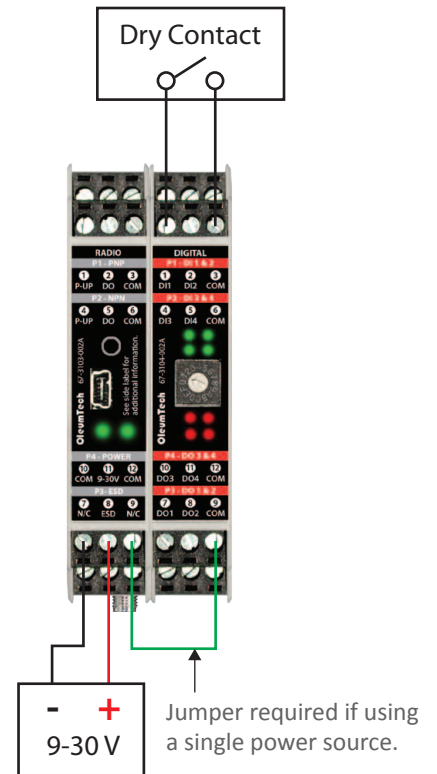
Jumper required if using a single power source.

Open/Off = 2.4 to 30 V ( $V_{ih} = 2.4\text{ V}$ )  
 Closed/On = 0 to 1.0 V ( $V_{il} = 1.1\text{ V}$ )

LEDs turn on when 0 to 1 V is detected

LEDs turn off when 2.4 to 30 V is detected

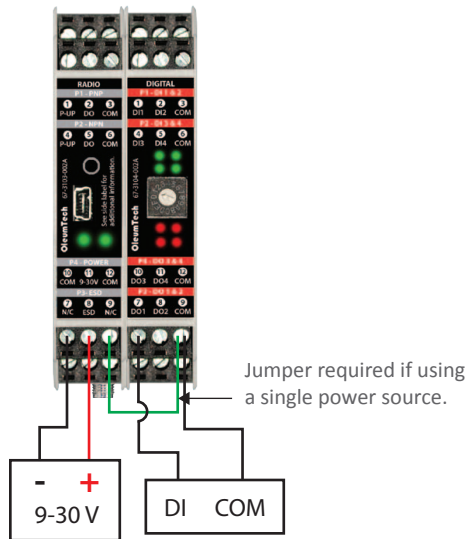
## 8. Dry Contact Input



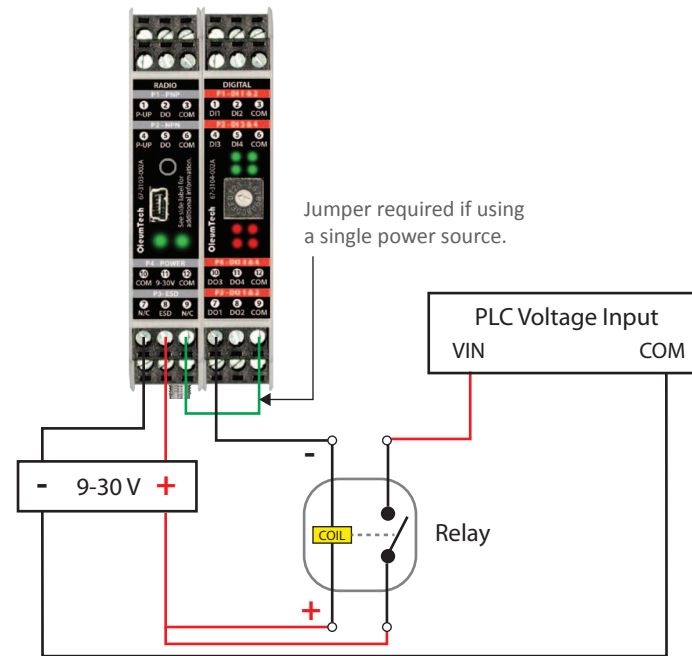
Jumper required if using a single power source.

# WIO<sup>®</sup> System Wiring Diagrams for Radio Kit RM1K

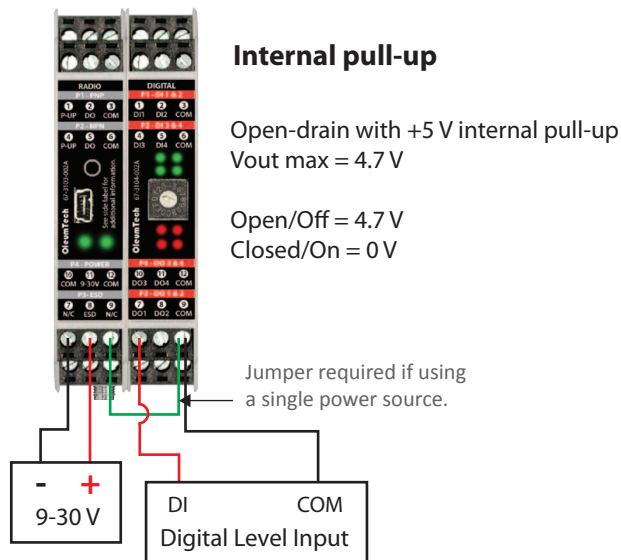
## 9. Dry Contact Output



## 10. Digital Level Output - Active High



## 11. Digital Level Output - Active Low



## 12. Digital Level Output - Active Low

