A Wildeye can be used to push data from an existing SCADA 4-20mA sensor to the web without intefering with the operation of the SCADA system.

This tech note explains how to use a loop-isolator to share the 4-20mA sensor signal to the wildeye.

The loop isolator is a loop-powered type which means that no additional power source is necessary to power the loop isolator.

The wildeye itself should be the battery powered type, or the externally powered rechargeable type requiring external power.

This same setup can be used for any situation where a 4-20mA or current loop sensor feeds data to an existing data recording device such a a SCADA system, PLC or data-logger.

Application

Use a loop isolator to share the signal coming from an existing 4-20mA sensor between an existing data recording device and a Wildeye.

The loop isolator will ensure that the signal feed to the original 3rd party data recording is not affected.

The isolator will also ensure that the wildeye is electrically isolated from the original system so that damaging any high voltages can cross in either direction.
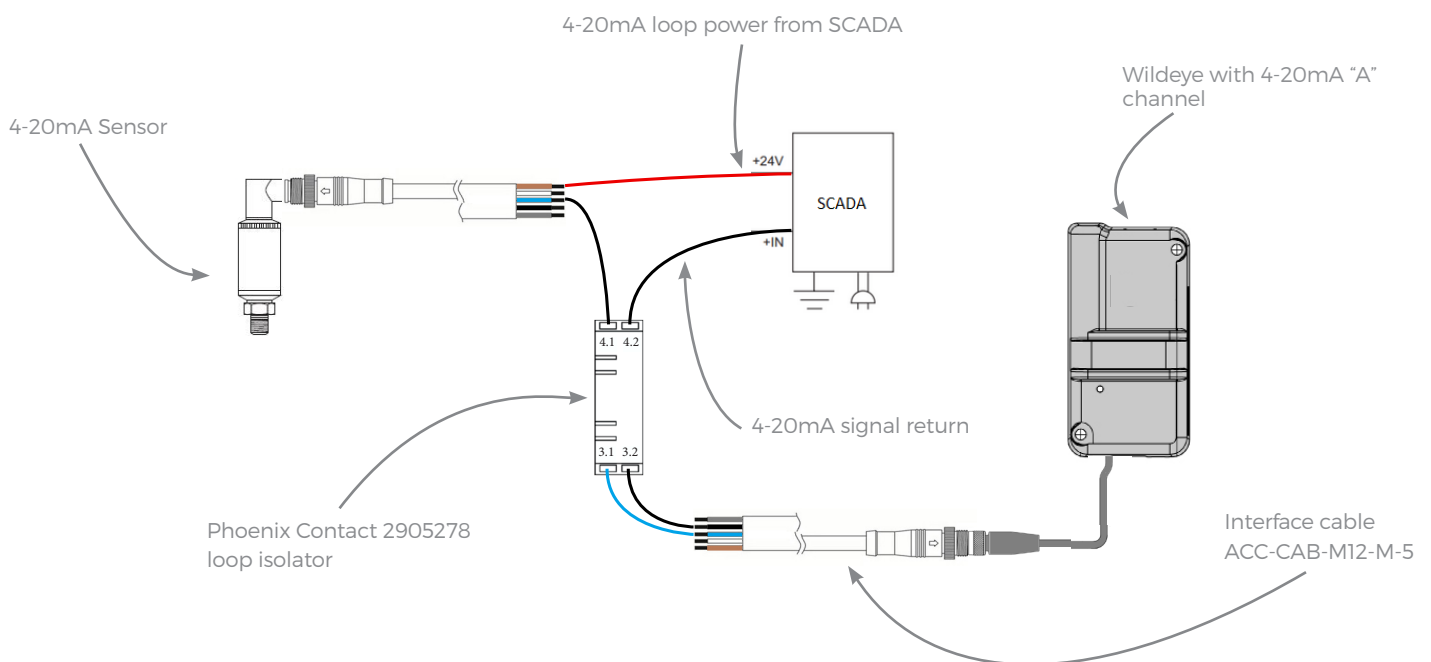
Electrical connection

· Wildeye recommends the following loop isolator, which can be supplied by Wildeye.

Manufacturer:	Phoenix Contact
Part Number:	2905278
Description:	SINGLE-CHANNEL 2-WAY ISOLATOR

· The electrical diagrams below as for the Phoenix Contact single channel 2-way isolator, but they will apply to any equivalent isolator.

4-20mA loop power from SCADA

Wildeye with 4-20mA "A" channel

4-20mA Sensor

+24V

SCADA

+IN

4-20mA signal return

4.1 4.2

3.1 3.2

Phoenix Contact 2905278 loop isolator
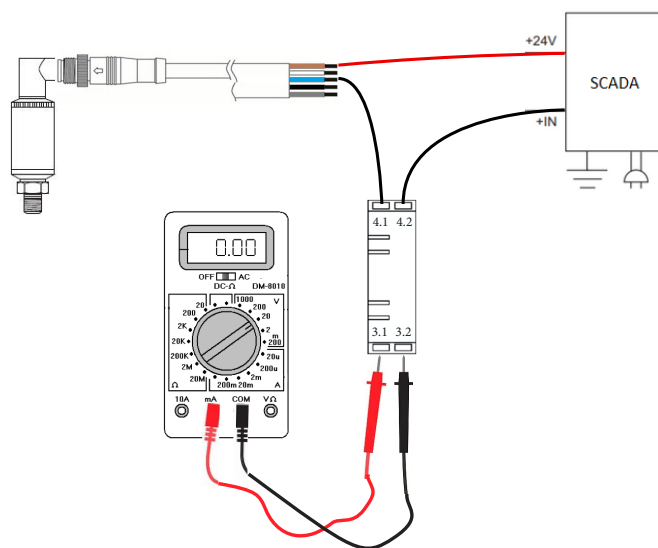
Interface cable ACC-CAB-M12-M-5

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Trouble Shooting

1. Use a multimeter to check the current on the input side of the loop is 4mA or higher. If not, go to step 3.

2. If current on input side does read 4mA or higher, check the current on the output side matches. If not, go to step 3.

3. Use a 12V SLA battery or other 12-24V power source in place of the SCADA system. If input side does not read sensor may be faulty. If input side reads, but not output side, isolator may be faulty.

1. Check current on the input side
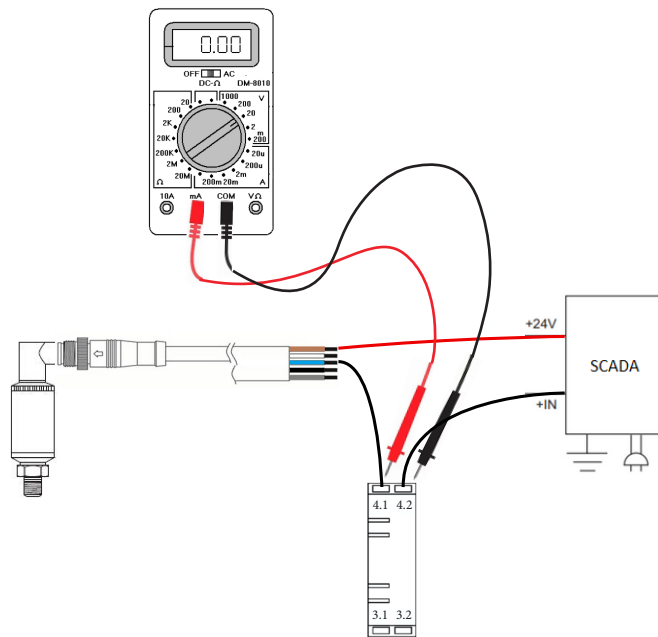
2. Check current on the output side

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