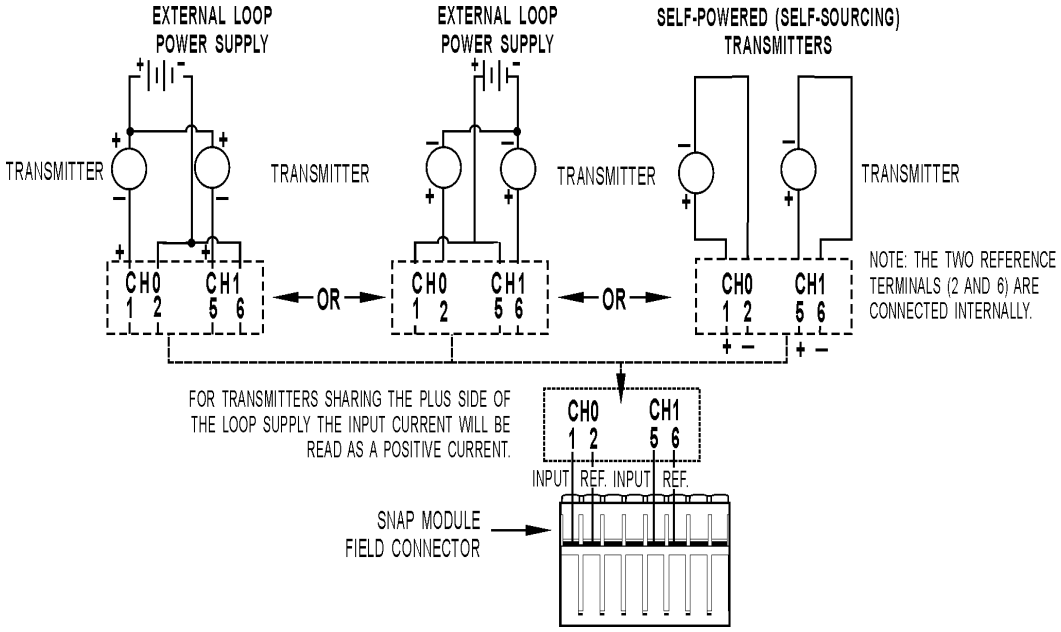
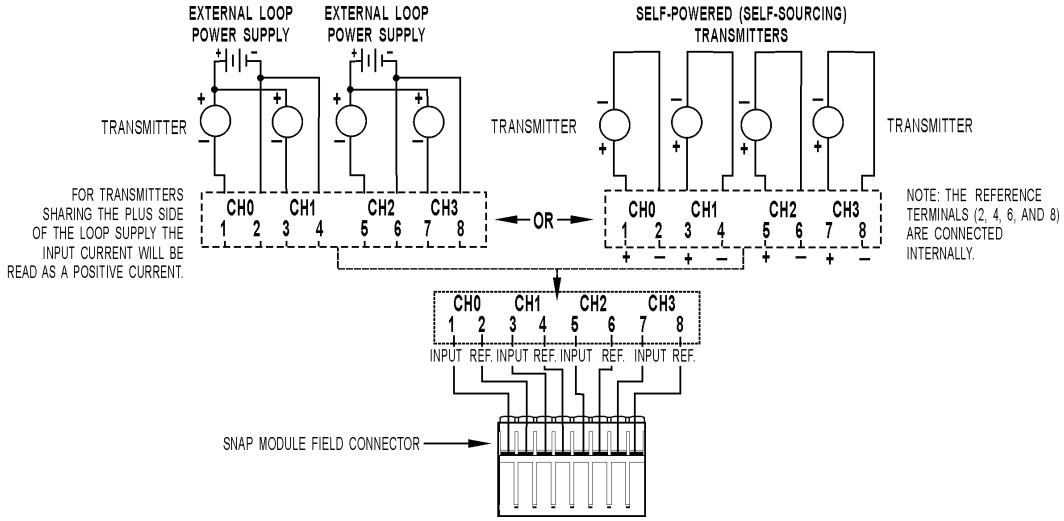
Wiring for SNAP-AIMA two-channel analog current input.

Since all inputs share a common reference, the module must be installed at the beginning or end of a typical 4–20 mA loop. If you are using both standard and self-sourcing transmitters, either put the transmitters on different modules, or use different power supplies. Do not use standard and self-sourcing transmitters on the same module.
This module does NOT supply loop excitation current.



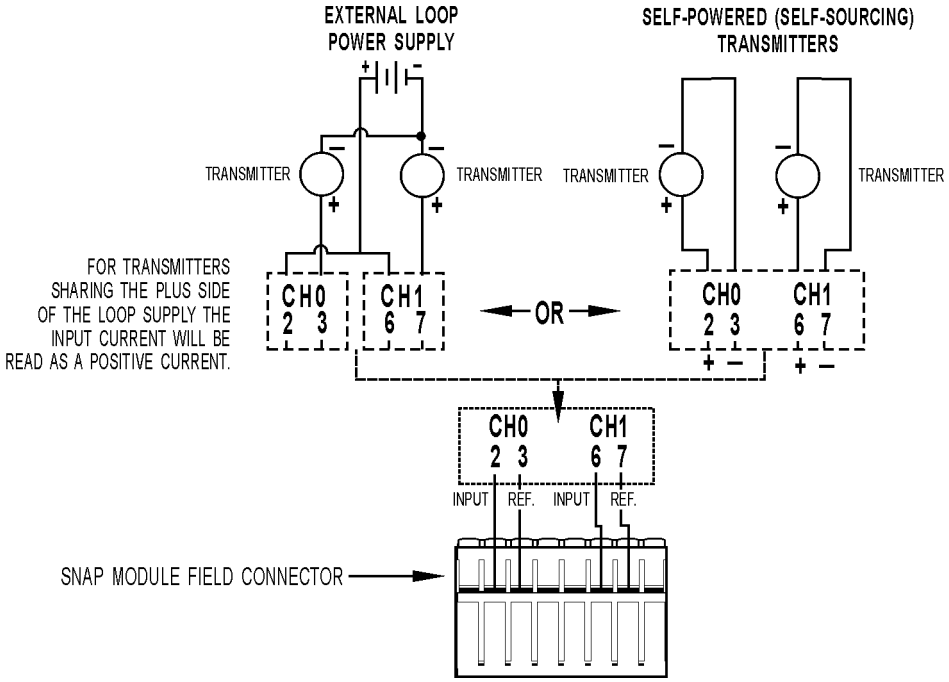
Wiring for SNAP-AIMA-4 four-channel analog current input.

Since all inputs share a common reference, the module must be installed at the beginning or end of a typical 4–20 mA loop. If you are using both standard and self-sourcing transmitters, either put the transmitters on different modules, or use different power supplies. Do not use standard and self-sourcing transmitters on the same module.
This module does NOT supply loop excitation current.



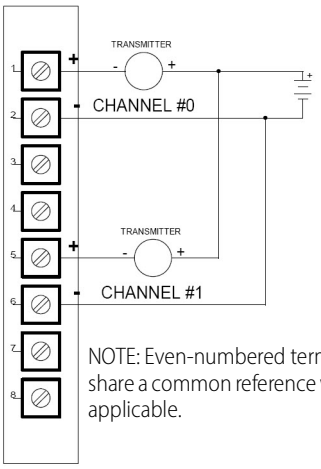
Wiring for SNAP-AIMA-i and SNAP-AIMA2-i isolated two-channel analog current inputs.

The two channels are isolated from each other.
This module does NOT supply loop excitation current.



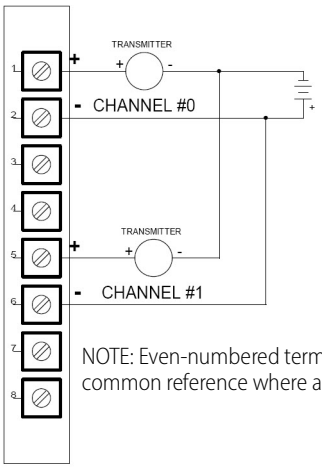
SNAP-AIMA Wiring: Positive Common vs. Negative Common Connections.

The following diagrams apply to SNAP-AIMA-2, SNAP-AIMA-4, and SNAP-AIMA-8 modules.



NOTE: Even-numbered terminals share a common reference where applicable.

SNAP-AIMA
For transmitters sharing the plus side of the loop supply.
Note that input current will be read as a positive current.



NOTE: Even-numbered terminals share a common reference where applicable.

SNAP-AIMA
For transmitters sharing the minus side of the loop supply.
Note that input current will be read as a negative current.

SNAP-AIMA and SNAP-AIMA-4

Input Range	-20 mA to +20 mA
Resolution	0.8 microamps
Over-Range Limits	From -22 to +22 mA (+/-20 mA range)
Input Response Time (% of span/ delta I/delta tme)	99.9% / 19.9 mA / 10 ms
Data Freshness (Max)	SNAP-AIMA: 11.5 ms SNAP-AIMA-4: 23 ms
DC Common Mode Rejection	>-120 dB
AC Common Mode Rejection	>-120 dB @ 60 Hz
Maximum Survivable Input	36 mA or 9 VDC
Maximum Operating Common Mode Voltage	250 V
Accuracy	0.05% (10 microamps)
DRIFT: Gain Temperature Coefficient	30 PPM/ °C
DRIFT: Offset Temperature Coefficient	15 PPM/ °C
Power Requirements	5 VDC (±0.15) @ 170 mA
Input Resistance - Single Ended	200 ohms (each channel)
Operating Temperature	-20 °C to 70 °C
Storage Temperature	-40 °C to 85 °C
Humidity	5-95%, non-condensing
Torque, hold-down screws	Not to exceed 1 in-lb (0.11 N-m)
Torque, connector screws	5.22 in-lb (0.59 N-m)
Wire size	22 to 14 AWG
Agency Approvals	UL, CE, RoHS, DFARS; UKCA ATEX (SNAP-AIMA-4 only) NEBS (SNAP-AIMA only)
Warranty	Lifetime

SNAP-AIMA-8

Input Range	-20 mA to +20 mA
Over-Range Limits	From -22 to +22 mA (+/-20 mA range)
Resolution	0.8 microamps
Data Freshness (Max)	0.28 seconds
DC Common Mode Rejection	>-120 dB
AC Common Mode Rejection	>-120 dB @ 60 Hz
Maximum Survivable Input	36 mA or 9 VDC
Maximum Operating Common Mode Voltage	250 V
Accuracy	0.05% (10 microamps)
DRIFT: Gain Temperature Coefficient	30 PPM/ °C
DRIFT: Offset Temperature Coefficient	15 PPM/ °C
Isolation	1500 V
Power Requirements	5 VDC (±0.15) @ 170 mA
Input Resistance - Single Ended	100 ohms (all channels share the same reference point)
Operating Temperature	-20 °C to 70 °C
Storage Temperature	-40 °C to 85 °C
Humidity	5-95%, non-condensing
Torque, hold-down screws	Not to exceed 1 in-lb (0.11 N-m)
Torque, connector screws	1.7 in-lb (0.19 N-m)
Agency Approvals	CE, RoHS, DFARS
Warranty	Lifetime