



Signal Conditioners, Isolators & Converters

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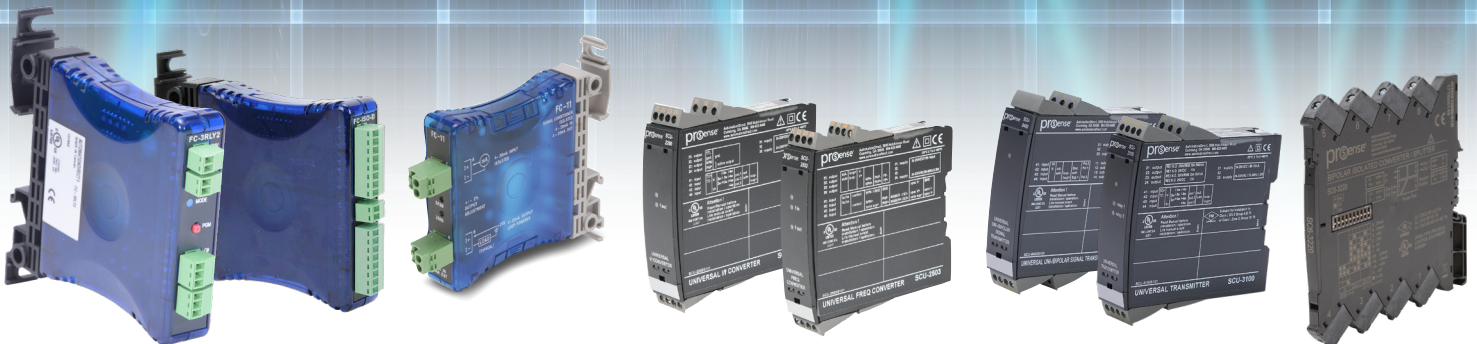
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pro^osense[®]



Signal Conditioners, Isolators & Converters

Signal integrity starts with quality measurement equipment. However, even with the best equipment, signals can be degraded if the equipment is not properly installed or is not protected by signal conditioners/signal isolators.

Signal integrity can be greatly impacted by poor shielding or wiring practices. The biggest factor is often ground loop errors (ground noise). Signal isolation or ground loop isolation is one way to

eliminate ground loop errors caused by ground noise and other signal interference problems.

Signal conditioner/isolators use one of many electronic methods to interrupt the connections between two grounds while passing the correct signal with little or no loss of accuracy. Without a way for ground currents to flow, these currents can't induce signal errors caused by ground noise.

High Speed Optical Isolators (Encoder Input)

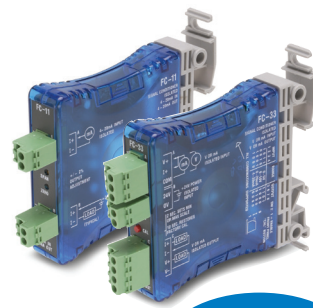
FC series optical isolators connect encoders to PLCs, servo drives, and other devices. They solve electrical noise issues; convert encoder signal types (differential line driver, open collector, NPN, pull-up, push-pull, totem pole) or voltage levels; provide multi-channel, high speed isolation for other sensor types; and are used as repeaters for long cable runs.

- Ideal for use with single-ended (open collector, NPN, pull-up, push-pull, totem pole) or differential line driver encoders

- FC-ISO-C Encoder signal conditioner and optical isolator with open collector output
- FC-ISO-D Encoder signal conditioner and optical isolator with differential line driver



starting at
\$157.00



starting at
\$145.00

DC Voltage or Current Input Signal Conditioners

DC voltage or current input signal conditioners offer isolation and conversion to/from unipolar to bipolar signals. The FC series signal conditioners are designed with a slim-line plastic housing which includes an integral 35mm DIN rail mounting adapter, LED indication, and removable screw terminal blocks for easy installation and wiring.

- FC-11 loop-powered signal conditioner and signal isolator for 4 to 20 mA inputs/outputs
- FC-33 isolated input/ output signal conditioner for voltage and current signals
- FC-B34 bipolar voltage to unipolar voltage or current signal conditioner
- FC-35B unipolar voltage or current to bipolar voltage signal conditioner
- FC-P3 potentiometer input, analog output signal conditioner

Universal Input Isolated Signal Conditioners

ProSense universal signal conditioners provide excellent flexibility to convert, transmit, scale and/or isolate process signals to meet requirements of a wide variety of applications. Use the removable programming module to make parameter adjustments, display process and status data, and to download configurations from one module to others.

- SCU-1400 - mA or VDC analog output
- SCU-1600 - mA or VDC analog output, 2 relay outputs
- SCU-2200 - NPN, PNP, and TTL frequency outputs scalable from 0 to 25,000 Hz
- SCU-3100 - 2 relay out
- SCU-7900 - AC RMS current or voltage input
- SCU-8400 - unipolar and bipolar input signals



starting at
\$224.00



starting at
\$141.00

Limit Alarms

Limit alarms accept analog inputs and provide low-limit, high-limit, or other alarm indications based on the input value. Voltage or current input signals are compared to trip/release points programmed via DIP switches. These analog-to-relay limit alarm modules can safeguard your system from abnormal conditions by alerting the proper personnel or taking the proper action when issues arise.

- Powered by 24VAC/VDC
- Input signal ranges: 0 to 15V, 0 to 30V or 0 to 20mA
- FC-3RLY2: (2) SPDT, Form C, non-latching relay outputs
- FC-3RLY4: (4) SPST, Form A, non-latching relay outputs
- Multiple relay control modes
- Trip/release point via DIP switches and push button configuration

High Density Signal Conditioners

ProSense 6mm-wide signal conditioners offer high-density DIN rail mounting. Single-, two-channel and signal splitter styles convert standard voltage and current signals, bipolar signals, thermocouples and RTDs, and provide isolation to eliminate ground loops. Power options include an in-rail power bus and models powered by input or output loops.

- Narrow 6mm high density DIN rail mounting
- Conversion of standard DC voltage and current signals, bipolar signals, thermocouples and RTDs
- Single-channel, two-channel and signal splitter models
- A variety of power options



starting at
\$108.00



starting at
\$253.00

Universal Frequency Transmitters

ProSense universal frequency transmitters accept frequency signals up to 100 kHz from NPN, PNP, TTL, tachometer, and NAMUR sensors, and provide unipolar or bipolar analog, frequency up to 100kHz, or relay outputs. An optional square root relationship between the input and output is also available for flow measurement applications.

- SCU-2501 with analog and relay outputs
- SCU-2502 with (2) relay outputs
- SCU-2503 with analog and frequency outputs



Spare Parts & Accessories

Spare parts and accessories for signal conditioners, isolators and converters include replacement terminal blocks, and a detachable programming/display module for some models

- FC series terminal blocks
- Detachable programming/display module

For special process applications such as temperature signal conditioning/transmission, please see our Temperature Sensors brochure