Moore Industries Signal Isolators, Converters and Splitters protect your process by converting, isolating, splitting, boosting and stepping down process signals so field instruments can interface directly with indicators, recorders, DCS, PLC, Asset Management, Control and SCADA systems. With a wide variety of products, you’ll be able to find the right one to fit your signal isolation or conversion needs.

Our Signal Isolators and Converters:

- **Isolate signals** to stop erroneous measurements caused by ground loops.
- **Convert signals** so field instruments can interface directly with an indicator, recorder, DCS, PLC, Asset Management, Control and SCADA system.
- **Isolate and protect Safety Instrumented Systems (SIS) loops** by using exida® approved SIL capable and HART pass-thru isolators.
- **Split one signal** to allow one primary measurement to be sent to two separate systems.
- **Protect equipment and signals (area isolation)** by eliminating common electrical paths.
- **Amplify signals** so that more instruments can be added to an overburdened loop.
- **Solve “bucking” power supplies** by stopping a conflict caused by a 4-wire transmitter and a DCS both trying to power the same process loop.
- **Solve DCS start-up problems** caused by non-isolated transmitters by installing an isolator in each troublesome loop.

Demand Moore Reliability • www.miinet.com

June 2016
SSX and SST Functional Safety Isolators and Splitters

These exida® certified SIL 2/3 capable 2-wire and 4-wire Isolators and Splitter provide isolation and signal splitting for your Safety Instrumented Systems (SIS) needs.

These units protect and enhance loops and also pass valuable HART® data from the field transmitter to host systems and vice-versa. They isolate your SIS from your Basic Process Control System or monitoring system so disconnections or failures to these secondary systems don’t affect your safety system.

HIX/HIT 2- and 4-Wire HART® Isolators

HIX/HIT HART® Isolators provide highly economical solutions to common and costly problems that plague many of today’s “smart” process loops. Protect and enhance your HART investment with the 2-wire (loop powered) HIX or the 4-wire (line-mains powered) HIT.

Features
• Isolates while passing valuable HART diagnostic and process data from your smart HART field device and your control or asset management system.
• Perform equipment maintenance without loop downtime with area isolation. The passive input on the input side of the HIX allows the output side devices or loop to be taken off-line or worked on without disrupting the DCS or primary side of the control loop.
• Standardize on HART capable isolators. Stock HART isolators and be free from worry over whether your isolator needs to interface with a HART or non-HART loop. Standard isolators block the HART signal and don’t allow handheld or asset managers to communicate with your HART field device.

ECT-DIN 2- and 4-Wire Signal Isolators, Converters, Repeaters and Splitters

ECT DIN-style signal isolators, converters, repeaters, boosters and splitters are rugged and reliable and available in 2-wire (loop) and 4-wire (line/mains) powered models. The complete family delivers economical solutions for an expansive range of signal interface applications.

Features
• Superior signal isolation (up to 1500Vrms). Industrial-strength protection stops ground loops, motor noise, and other electrical interferences from affecting process signals.
• Amplify (boost) signals so that more instruments can be added to an overburdened loop.
• Split process signals, send two isolated signals to two separate locations.
• Get two isolators in one. The ECT is available in dual channel I/O models that provide application flexibility while reducing space requirements and costs.

SIY 2-Wire PC-Programmable DIN and Field-Mount Signal Isolators and Converters

The SIY combines smart digital technology with advanced analog operation to deliver superior reliability, accuracy, and ease of use. The highly versatile SIY programs to accept a wide range of current or voltage inputs. It outputs an isolated, proportional, 4-20mA signal. As a flexible analog/digital hybrid, this 2-wire (loop-powered) transmitter programs in seconds with easy to use free software to handle a wide range of important signal interface applications.

Features
• Wide range of signal input choices. The SIY handles the majority of current/voltage interface applications you are likely to encounter.
• PC-programmable with Windows® software. From a single screen, you can choose and then view to configure to your application specific operating parameters from a PC.
• HPP housing available for field-mount applications requiring intrinsically-safe, explosion-proof and flameproof approvals.
• Fast measurement cycle. Delivering an output update up to eight times per second, you’ll get analog speed combined with digital versatility.
All Isolators Feature:
• Standard 20v/m RFI/EMI protection: Special circuit and enclosure designs protect against the harmful effects of radio frequency interference (RFI) and electromagnetic interference (EMI).
• Rugged housing: All instruments are available in an aluminum DIN style housing that is more rugged and durable than isolators housed in a plastic case. The aluminum housings also act as a heat sink for those demanding high temperature applications where plastic housings under perform.
• Long-term stability: Provides up to 5 years between scheduled calibrations.

Certificates Include (vary by product):
• CSA: Canadian Standards Association
• CE: Conformité Européenne
• UL: Underwriters Laboratories
• FM: Factory Mutual Research
• ANZEx: Australian & New Zealand Program for the Certification of Equipment for Explosive Atmospheres

More Signal Transmitters, Isolators and Converters

MIX and MIT miniMoore 2-Wire and 4-Wire Multi-Channel Signal Isolators and Converters
Featuring a very narrow installation footprint, the reliable and economical miniMOORE™ combines multiple analog signal channels in a single signal conditioner. This multi-channel family includes the MIX 2-wire (loop-powered) and the MIT 4-wire (line/mains-powered) models.

Features:
• Multi-channel – Two or four isolators per DIN-rail housing.
• Removable terminals.
• Input impedance: 50 ohms for current; 1Mohms for voltage.

CPT 4-Wire PC-Programmable Signal Isolator and Converter
The universal CPT is a 4-wire (line/mains-powered) PC-Programmable Temperature Transmitter and Signal Isolator/Converter that provides an isolated and linear current or voltage output (any range within 0-20mA or 0-10V) proportional to the input. The signal is ready for direct interface with readout instruments, recorders, PLC, DCS, Control or SCADA systems.

Features:
• Accepts direct input from a wide array of sensors and analog devices: 23 RTD Types, 9 Thermocouple Types, Current and Voltage Signals, Resistance and Potentiometer Devices and Direct Millivolt Sources.
• User-selectable failure mode: Upon input failure, the CPT's analog output can be user-set for upscale or downscale drive, fail to last value, or fail to selected value.
• Combined alarm trip and transmitter: The alarm trip option reduces costs and installation time when both transmitter and alarm functions are needed at the same location.

SIX 2-Wire Signal Isolator, Converter and Repeater
The versatile SIX can be used as a signal isolator, converter, and repeater. Ideal for installation in the plant and control room, the 2-wire (loop-powered) SIX derives its power from the process loop, eliminating the need to install an additional power supply.

Features:
• Repeater/diverter: Increase drive capability to a process loop, allowing installation of additional instruments on the loop. Diverts a secondary signal from a process loop to a recorder, indicator or other similar device.
• Low current impedance/high drive capability: Exceptionally low 50 ohms (for 4-20mA input) impedance doesn't load existing loops and regenerates the signal.

FCT 4-Wire Field-Configurable Signal Isolator and Converter
The FCT can be used as a signal isolator, converter and/or repeater. Features field-configurable input and output parameters, and universal power input.

Features:
• Configurable inputs and outputs. Easily field-configured to accommodate all common input and output signal types (4-20mA, 1-5V, 0-10V, etc.)
• Powers a 2-wire transmitter. Transmitter excitation is standard on all universal (PRG) input/output FCTs.