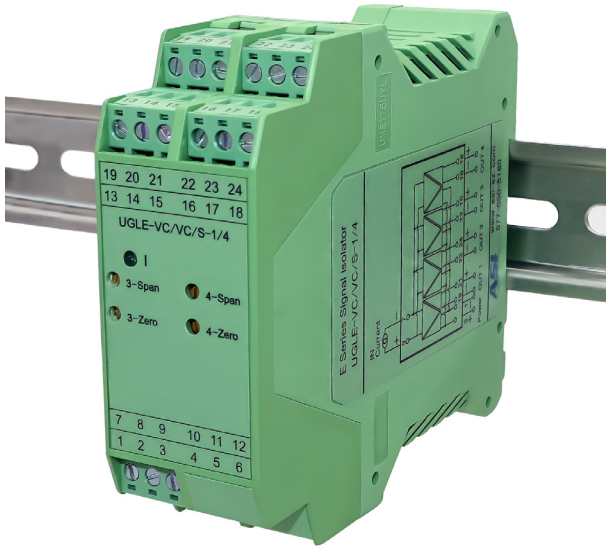
ASI451141 Analog Signal Splitter



The ASI451141 4-20mA Signal Splitter expands one analog input into four fully isolated outputs, ensuring reliable multi-point signal distribution in process automation, water treatment, and factory automation systems.

Operating on 24V DC power, this DIN rail-mount signal conditioner provides high-precision isolation, protecting control equipment from electrical noise and interference. With 4 isolated outputs, it is perfect for feeding multiple PLCs, data loggers, and monitoring systems from a single source.

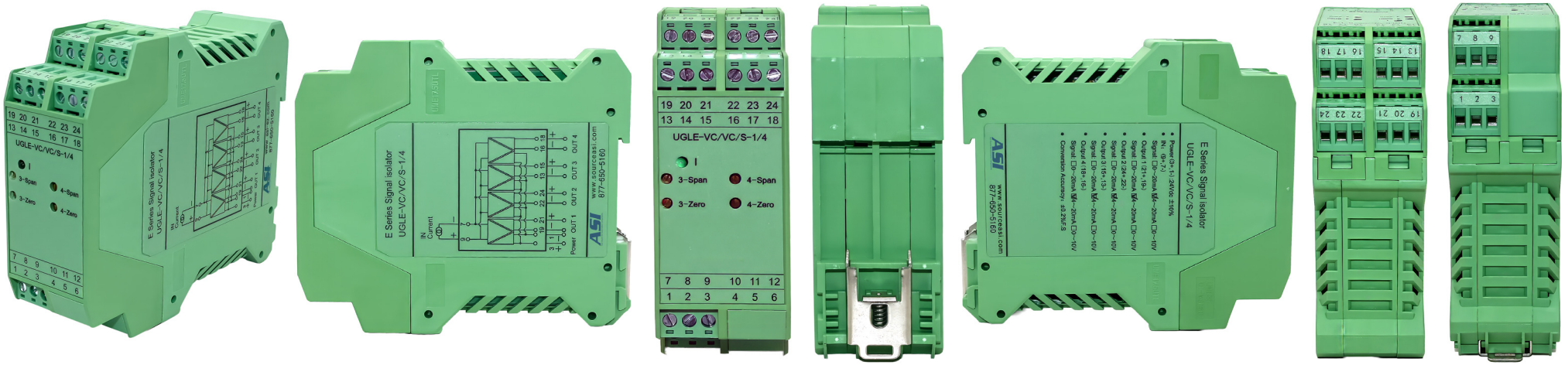
Key Features & Benefits:

- Multi-Point Signal Distribution –
  Converts one 4-20mA input into 4 isolated outputs, enabling multiple device connections.
- Prevents Ground Loops & Signal Noise – Ensures stable, interference-free signal transmission, protecting control systems from electrical disturbances.
- High Accuracy & Fast Response –
  Reliable signal replication for precise control and real-time monitoring.
- DIN Rail Mounted for Easy Installation – Compact form factor allows quick integration into control panels and industrial enclosures.
- 24V DC Powered – Efficient and reliable operation, ensuring compatibility with standard industrial power supplies.
- Industrial-Grade Durability – Built to withstand harsh environments, ensuring long-term performance in process automation applications.
- Cost-Effective Alternative to Major Brands – Delivers high-performance signal splitting at a lower cost than Phoenix Contact, Weidmüller, and other premium brands.

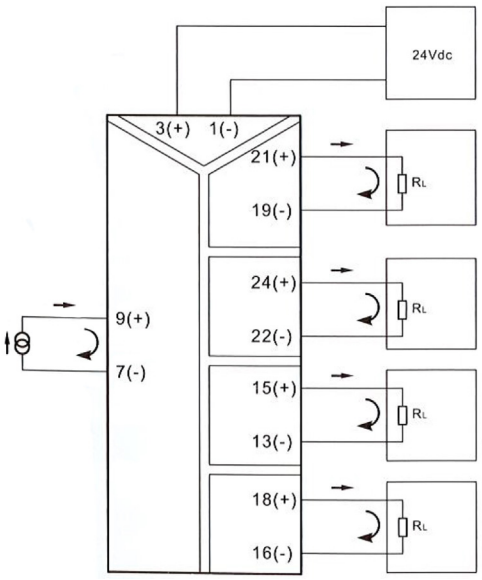
1 Input, 4 Isolated Outputs	ASI451141
Dimensions	
Depth/Width/Height	99 x 35 x 114 mm
Input	
Input Signal	4-20mA or 0-10 V
Current Input Impedance	≤ 100 Ω
Voltage Input Impedance	≤ 1M Ω
Output	
Output Signal	4-20mA
Load Resistance	RL ≥ 300 Ω 6 V
Technical Information	
Power Supply	24 Vdc ±10%
Power Consumption (24V DC Power Supply)	≤ 60mA
Output Accuracy (20° C)	0.2% FS
Temperature Drift (-20° C ~ +60 °C)	0.05% FS/10° C
Response Time	≤ 100mS
Dielectric Strength (Between input, Output and Power)	1000 Vac, 1 min
Insulation Resistance (Between input, Output and Power)	≤ 100M Ω
Electromagnetic Compatibility	GB/T 18268 (IEC 61326-1)
Ambient Temperature	-20°C to +60 °C

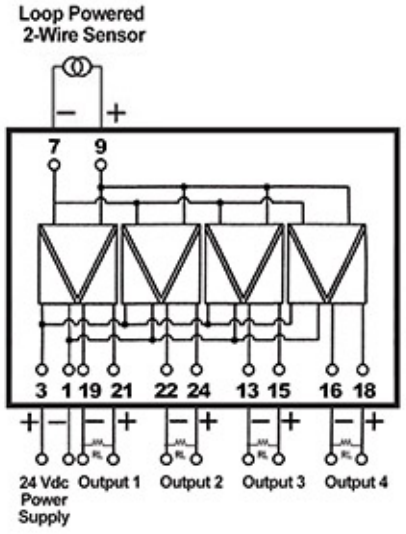
Proprietary Information

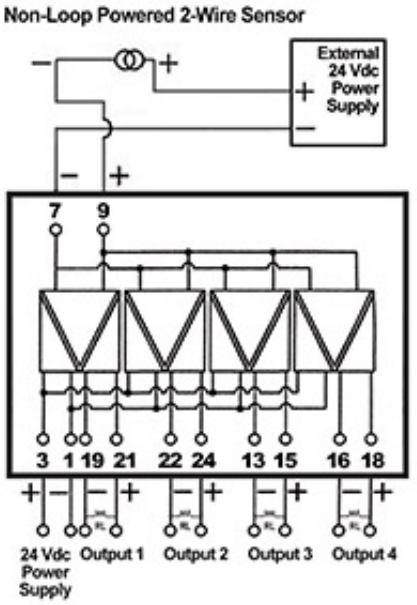
Addtional Photos



Diagrams







Please Note:

Outputs 3 and 4: Calibration and Setup Adjustments are made via the potentiometers on top of the module.

Outputs 1 and 2: The module must be opened to access to the potentiometers located on the printed circuit board.

Calibration and Setup Procedure:

1.) This module has been calibrated at the factory, do NOT attempt to recalibrate this module unless absolutely required.

2.) After connecting the power wires allow the module to warm up a few minutes prior to calibration.

3.) Use a grounded screwdriver for adjustments to avoid ESD damage to the circuit.

4.) Outputs 1, 2, 3 and 4 are separate from each other; calibrate them one by one.

5.) Always start by calibrating ZERO, then SPAN.

6.) For both ZERO and SPAN, turn the potentiometer clockwise to increase and counterclockwise to reduce the output.

7.) An accurate multimeter is always required to get good measurement results.

Calibration and Setup Procedure Steps:
Step 1: Connect the input signal and the output load as required for the output to be calibrated.

Step 2: Adjust the input signal to precisely 4.00 mA DC (ZERO); then adjust the output zero pot until the output reads precisely 4.000 mA ± 0.08mA DC.

Step 3: Adjust the input signal to precisely 20.00 mA DC (SPAN); then adjust the output span pot until the output reads precisely 20.000 mA ± 0.08mA DC.

Step 4: Repeat steps 2 & 3 until the readings converge.

Step 5: Repeat steps 1-4 for the second, third and fourth output's calibration.

Step 6: As a confirmation step for the calibration and setup results, adjust the input current signal to 12.00mA.

Step 7: Confirm that the output value is within the range of 11.94mA and 12.06mA.