

**DESCRIPTION**

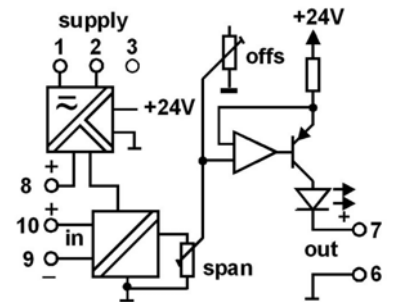
The SI139 is a isolating transmitter designed for factory set input output combinations providing true 3-way galvanic isolation up to 2000V rms. The power supply (ac or dc) is magnetically coupled to both the input and the output circuit section separately, achieving power/input/output isolation. Input signals are transferred optically to the output stage. The standard Signal Isolator will accept DC voltage or current input signals directly (0.1V up to 100V, 1mA up to 100mA). The SI139 also accepts a wide variety of different sensors and signals using optional input conditioning card. Final calibration is trimmed using the front accessible 'offs' and 'span' 15-turn trim adjustments. The output signal level is indicated by a green LED on front of the module, giving a clear indication of module function, signal presence and loop condition for current outputs. Various power supply choices are available ranging from 240Vac down to 8Vdc. All supply models contain a dual output for power isolation. Reverse or direct action are factory configured. Special requirements for input/output response time variation can be accommodated by optional "customised response" or "output ramp" models. Surge protection for power supply and input is standard with all Series 100 modules.



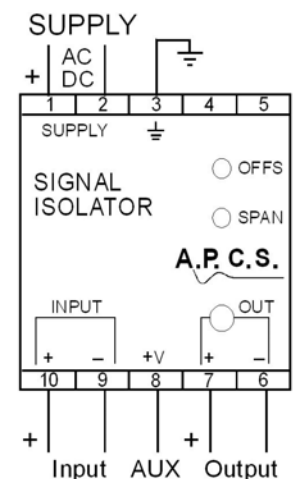
**General Specifications**

- Size: 52 W x 70 H x 110 D (mm).
- Housing material: ABS.
- Mounting: DIN-Rail, gear plate.
- Termination: Screw terminals on front  
Terminal covers standard.
- Protection class: IP40.
- Weight: 0.300 kg.
- Accuracy: 0.15% of span.
- Front 'OFFS' adjust: ±20% typical.
- Front 'SPAN' adjust: ±20% typical.
- Linearity: 0.15% of span above 0.2mA.
- Repeatability: 0.1% of span.
- Response time: 0.5 sec for T90 standard. Faster or slower response on request
- Temperature effect: Typically 0.02% of span/C.
- Operating temp. range: -10...+60C.
- Storage temp. range: -20...+70C.
- Output loop drive: 10mA into 0 - 2kΩ, 20mA into 0 - 1kΩ,  
50mA into 0 - 400Ω  
Higher output drive on request.
- Output load change effect: less than 0.2% up to maximum load stated.
- Input/output isolation: >2kV rms.
- Power requirements: 3W.
- Electromagnetic compatibility: Complies with AS/NZS 4251.1 (EN 50081.1)
- Optional input specifications: All specifications quoted in this general section are for the standard inputs only. Specifications for the optional inputs are available upon request.

**Block Diagram**



**Connection Diagram**



For input / output combinations refer to TYPE NO. DESIGNATION overleaf.

