

The 1DSA-05 converts a differential voltage into a corresponding single-ended voltage with respect to an external ground reference. The 1DSA-05 can be used as an extension of the electronic module (Module E) of SENIS's single-axis magnetic flux density to voltage transducers: it enables measurement of the transducer output voltage using the instruments that have single-ended inputs (such as oscilloscopes).

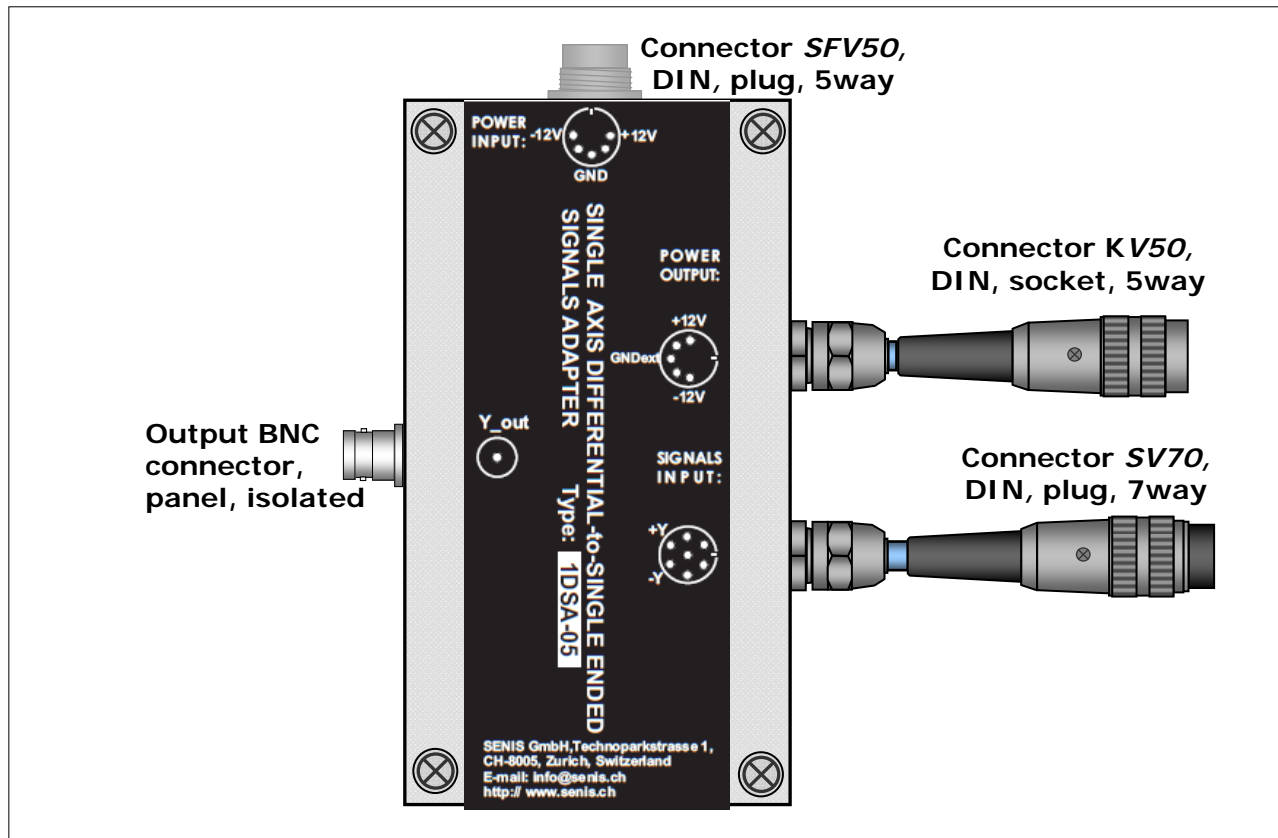


Figure 1. The structure of Single-Axis Differential-to single ended Adapter 1DSA-05

Mechanical & Electronics Specifications:	
Gain (Output single-ended voltage / Input differential voltage Conversion Ratio)	1.0 (0dB) (with max. tolerance $\pm 0.1\%$)
Small-signal bandwidth	3 MHz
Slew rate	10 V / μ s
Differential Signal Input Connector	Connector SV70, DIN, plug, straight, 7 poles Field signal Y+, Y- Pins 4 and 3, respectively
Power Input Connector	Connector SFV50, DIN, plug, panel, 5 poles Power, +12V Pin 3 Power, -12V Pin 1 Power common (GND) Pin 2
Power Output Connector	Connector KV50, DIN, socket, straight, 5 poles Power, +12V Pin 3 Power, -12V Pin 1 Power common (GND _{ext}) Pin 2
Single-ended Output Signals Connector	Standard BNC connector, panel, isolated

External ground reference (GND _{ext})	to be connected to the external contacts of the BNC output signals connectors	
Resistance between the External ground reference and the Power common (GND)	≈ 100 Ω	
Electronics module (3DSA-05)	High mechanical strength, electrically shielded aluminum case [60 W x 110 L x 31 H mm] with mounting provision	
DC Power	Voltage Current	± 12 V nominal, ± 10 % cca. 60 mA
Environmental Parameters:		
Operating temperature	+5°C to +45°C	
Storage temperature	-20°C to +85°C	