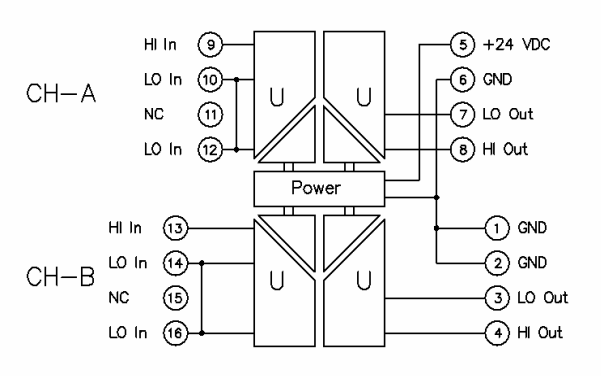
Data sheet	Dual Isolated Signal Conditioner: PI335 Dual ISC	

Description

The Signal Conditioning Module ***PI335 Dual ISC*** consists of two independent isolating amplifier channels. The inputs can be configured for bipolar voltage ranges of 10V, 20V, 50V, 100V and 200V. The output voltage range is always ±10V.

Signal input, signal output and power supply voltage are isolated - see Block diagram / Pin number assignment below:



Configuration

For configuration changes, you have to unlock and open the enclosure (see below)

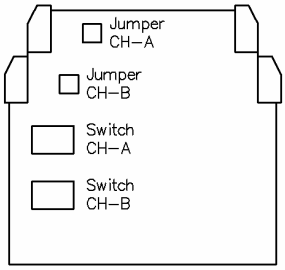
Take protective measures against electrostatic discharge !

Set the jumpers and switches according the configuration table on the right

Jumpers CH-A and CH-B are on the main board.

Switches CH-A und CH-B are on the piggyback board.

Range	Jumper	Switch 1 2 3 4
10V		
20V		
50V		
100V		
200V		



Technical Data

Input voltage ranges:	±10V, ±20V, ±50V, ±100V, ±200V
Input resistance:	100kOhm 200kOhm @ 200V range
Max. input voltage:	150V steady state 250V @ 200V range
Output voltage:	±10V (Load > 2kOhm)
Isolation Voltage:	500V Input to GND 100V Output to GND
Power supply voltage:	20..30V DC
Power consumption:	app. 3W @ 24V (1.5W per ch.)

Transmission error:	< 0.1% of end value	
Temperature coefficient:	< 80ppm / °C	
Cut-off frequency:	50kHz (-3dB)	
Ambient temperature range:	0..50°C (32..122°F)	
Dimensions:	114 x 100 x 22.5 mm	
EMC:	according with	EN 50082-1(-2)
Electrostatic discharge:	8 kV - in air	EN 61000-4-2
Fast transient burst:	2kV / 5kHz	EN 61000-4-4
Surge voltage:	2kV / 42Ohm	EN 61000-4-5

Mounting

The modules should be mounted in vertical position, with a free space of at least 15mm to the next device, to obtain a adequate cooling.

Remarks

A possible shield wire on the input side should be connected to the "Lo In" clamp.

A possible shield wire on the output side should be connected to the "GND" clamp (Ground potential of the 24V power-supply voltage).