

## OVERVIEW



The model USB-10-4 is a 4 channel LVDT signal conditioner that operates four LVDTs simultaneously, and converts the reading using 21 bit A to D converter. Four digital readings are displayed on the LCD screen. It can communicate with PC using USB port.

With USB interface there is no need for an external power supply. The maximum interface cable length is 5 meters max. When USB port is disconnected, use an unregulated 5÷12VDC adapter, 250mA max, external power supply. The display has a +/-9.9999 count resolution, with adjustable zero and scale.

- 1÷4 Channels
- 21 bit resolution, at 7 or 800Hz Output Rate
- Software selectable gain and zero adjustment
- Digital filtering and conversion rate
- Software selectable linearization (optional – added upon client request)
- 16x2 alphanumeric characters LCD display
- Programmable multi condition digital limit output (optional – added upon client request)
- USB data communication channel
- Supporting six, five and four wire LVDTs
- Active analog filters (set at the factory according to client request)
- No power supply needed when using USB channel.
- Readout by alphanumeric panel or PC installed software
- Supplied with operating and data collecting software

## SPECIFICATIONS

### LVDT excitation for every channel

Voltage ..... 3.5 V rms @ 20 mA max  
Frequency ..... 1 to 5 kHz, selectable upon request

### Signal Input

Input Voltage Range ..... 1V RMS max  
Impedance ..... >100 kΩ

### Functions

Zero adjustment ..... Using PC based software or Front Panel  
Gain adjustment ..... Using PC based software or Front Panel

Resolution ..... 21 bit  
Conversion Rate ..... 7 or 800 conversions per second, selected from PC

Non Volatile memory ..... Flash memory

Low Pass Filtering ..... Digital filtering > 80 dB, 50 Hz  
Readout Display ..... 5 digit (±9.9999 counts)  
Serial Communication Port ..... USB  
Serial Protocol ..... Binary Code (3 Bytesx4channels)  
Communication Cable length .... ≤5m  
Power supply ..... 5÷12V DC from adapter when disconnected from USB  
Operating temperature range ... +5°c to +55°c  
Dimension (mm) ..... 125 x 106 x 33  
Digital limit output ..... open collector up to 40V & 50mA (selectable upon request)

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### Rev. C