

# USB-10 LVDT Conditioner Unit



The model USB-10 is an LVDT signal conditioner that provides analog and digital outputs, multiple 5V pulses (set points for pulse start and pulse stop) of adjustable position and length, and LCD display. It can communicate with other digital devices using both USB and RS-232 interfaces.

With USB interface there is no need for an external power supply, and the maximum length of the interface cable is 5 meters max. For RS-232 an unregulated 5÷12VDC adapter, 250mA max, and the cable length can be up to 20 meters. The display has a +/-999,999 counts resolution, with adjustable zero and scale.

- 21 bit resolution at 7 or 70Hz Output Rate.
- Software selectable scale and zero adjustment.
- Software selectable digital filtering and conversion rate.
- Optional system linearization function by supplier.
- 16x2 alphanumeric characters LCD display.
- Programmable 2 points digital set points.
- Additional RS 232 data communication channel.
- Supporting five and four wire LVDTs.
- Additional analog output (un calibrated, 500 mV max).
- 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

<b>Voltage</b> .....	1.5 V rms @ 15 mA max
<b>Frequency</b> .....	1 to 10 kHz, selectable upon request

### Signal Input

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

### Functions

<b>Zero adjustment</b> .....	Using PC based software or Front panel
<b>Scale adjustment</b> .....	Using PC based software or Front panel
<b>Resolution</b> .....	21 bit
<b>Conversion Rate</b> .....	7 or 70 conversions per second, selected from PC
<b>Scale units</b> .....	Inches or millimeters, user selectable
<b>Non Volatile memory</b> .....	Flash memory
<b>Low Pass Filtering</b> .....	Digital filtering > 80 dB, 50 Hz
<b>Readout Display</b> .....	6 digit (±999.999 counts)
<b>Serial Communication Port</b> .....	USB and RS-232
<b>Serial Protocol</b> .....	Binary Code (3 Bytes)
<b>Communication Cable length</b> .....	≤ 5m for USB, ≤ 20m for RS-232
<b>Power supply</b> .....	5÷12V DC from adapter when disconnected from USB
<b>Operating temperature range</b> .....	+5C° to +55°C
<b>Dimension (mm)</b> .....	125 x 106 x 33
<b>Digital limit output</b> .....	Open collector, up to 40V & 50mA (selectable upon request)

### How To Order

Ordering example: Model Number: USB-10

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