

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 2 meter. For RS-232 an unregulated 9VDC adapter is required, 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.
- Software selectable scale and zero adjustment.
- Software selectable digital filtering and conversion rate.
- Optional system linearization function by supplier.
- Single line, 16 alphanumeric characters LCD display.
- Programmable 2 points digital set points.
- Additional RS 232 data communication channel.
- Supporting six, five and four wire LVDTs.
- Additional analog output.
- No power supply needed when using USB channel.
- Alphanumeric panel readout or PC installed software.
- Supplied with operating and data collecting software.
- USB 1.1 compatible.



Specifications

LVDT excitation

Voltage	1.5 V rms @ 15 mA max
Frequency	1 to 10 kHz, selectable upon request

Signal Input

Input Voltage Range	±2.5V
Sensitivity max	2.5 μ V
Impedance	>100 k Ω

Functions

Zero adjustment	Using PC based software (supplied), or from panel
Scale adjustment	Using PC based software (supplied), or from panel
Resolution	0.0001% of Full Scale
Conversion Rate	7 or 70 conversions per second, selected from PC
Scale units	Inches or millimeters, user selectable
Non Volatile memory	Flash memory
Low Pass Filtering	Digital filtering > 80 dB, 50 Hz
Readout Display	6 digit (\pm 999,999 counts)
Serial Communication Port	USB and RS-232
Serial Protocol	Binary Code (3 Bytes)
Communication Cable length	\leq 2m for USB, \leq 20m for RS-232
Power supply	+9V DC from adapter when disconnected from USB
Operating temperature range	+5C ^o to +55C ^o
Dimension (mm)	125 x 106 x 33
Digital limit output	Open collector, up to 40V & 50mA

How To Order

Ordering example: Model Number: USB-10

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