# LVDT Voltage Module (LVM-110)



The popular LVM-110, low cost LVDT/RVDT signal conditioner has been re-engineered to improve performance and versatility.

The new LVM has increased LVDT drive current capability, to expand compatibility to LVDTs with lower input impedances.

The LVM -110 is designed to be a low-cost LVDT signal conditioning solution for OEM applications, and is compatible with most standard and special design Schaevitz LVDTs and RVDT's.

New DIP switches replace DIP jumpers, simplifying gain and frequency setup procedure.

The new discreete circuit topology is optimized for improved signal to noise ratio and tempco, while maintaining form, fit and function backward compatibility with previous versions.



### **FEATURES**

- Small OEM Form Factor
- Low Cost
- Six DIP-Switch Selectable Gains
- 20-Turn Zero and Span Pots
- 100% Zero Suppression
- Card-Edge or Screw Termination
- Master/Slave Capability

## **APPLICATIONS**

- Position Feedback System
- Test and Measurement
- High Density Dimensional Gaging

#### **SPECIFICATIONS**

#### **Power Supply Requirements:**

Voltage  $\pm 15$  Vdc.  $\pm 10\%$  (for  $\pm 10$  Vdc output)  $\pm 12$  to  $\pm .15$  Vdc  $\pm 10\%$  (for  $\pm 5$  Vdc. Output)

Current 30mA (max)

Transducer Excitation:

Voltage 3.0 v-rms. ±10%

Current ≤ 20 mA (min LVDT Input impedance 150Ω)

Frequency 2.5, 5, 8, 10 kHz

Position Signal:  $\pm 10, \pm 5, 0$  to 10 or 0 to 5 Vdc

## Required Signal for ± 10Vdc

Output:

Minimum 100 mV rms. Maximum 5.6 V rms.

Frequency Response 250 Hz (-3db down low-pass 3-pole Butterworth)

Linearity < .05%

Operating Temperature 30 ° to 130 ° F (-1 ° to 54 ° C)
Storage Temperature -40 ° to 255 ° F (-40 ° to 125 ° C)

Tempco  $< .02\% / ^{\circ}F$ Zero Suppression  $\pm 6 \text{ Vdc}$ Output Impedance  $< 1 \Omega$ 

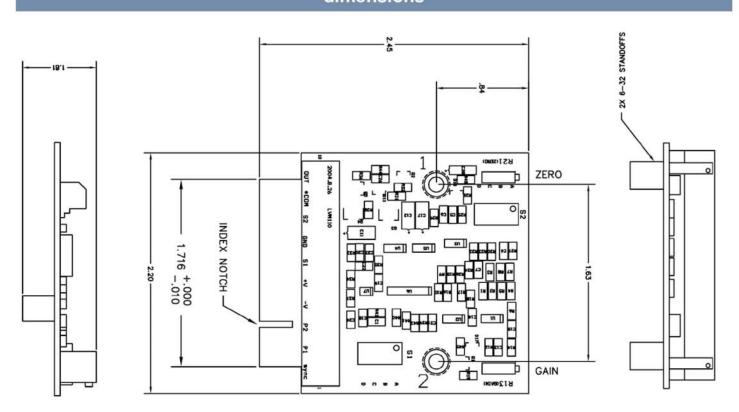
Noise and Ripple  $\leq 15 \text{ mV rms.}$ 

Stability .05% of FSO (after 15 min. warm-up)

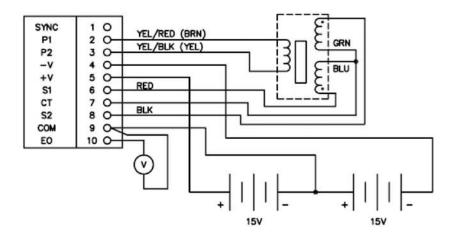
LVDT Voltage Module Rev 1 www.meas-spec.com 09/24/2008



## dimensions



# wiring



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