



## Model 4215-L LVDT Smart Indicator

The Model 4215-L Smart Indicator is an intelligent microprocessor-based instrument designed for the measurement and control of dual channel LVDT (Linear Variable Differential Transformer) measurement fixtures. It combines two simultaneous sample LVDT channels, print capabilities and RS 232/485 serial communication into a versatile platform that can be customized to deliver the most powerful and affordable instrumentation in its class.



The ESL Model 4215-L Advanced Digital LVDT Meter provides all excitation and signal conditioning necessary to operate dual LVDT expansion measurement fixtures. The average extension is computed automatically and displayed. The ESL Advanced Digital LVDT Meter also features analog outputs, limit switching, individual unit conversion and a two-line display. Factory options support mixing and matching of strain gauge and LVDT sensor inputs.

Whether you are upgrading an existing system or implementing a new one, the Model 4215-L brings you the accuracy, reliability, and repeatability needed to meet the most demanding applications.

### Standard Features:

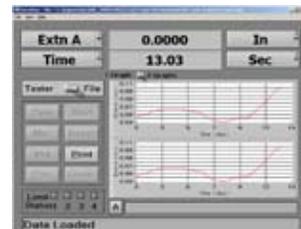
- Fully Bipolar Range +/- 999,999 display
- 24-bit resolution
- Linearity 0.05%
- Two channel *Simultaneous* read
- 2-line X 20-character vacuum fluorescent display
- Plug and Play TEDS-Tag® Auto LVDT Identification
- User input text label on second line of display
- Auto setup for 25 Model 4215-L units
- Functions include: peak / valley / hold / tracking / peak reset
- Quad limits output: independent, isolated solid state relays control AC or DC signals
- Six user-selectable filters
- Tri-state limit display: on, off, disabled
- Automatic display unit conversion: in, cm, %
- D/A output: +/-10V std; +/-5V, 0-5V, 0-10V std. per request
- Direct analog amplifier output
- RS485 std. upon request
- Full operation and calibration via RS232
- 5-point linearization
- Includes sum, difference, average of two channels

### Available Features:

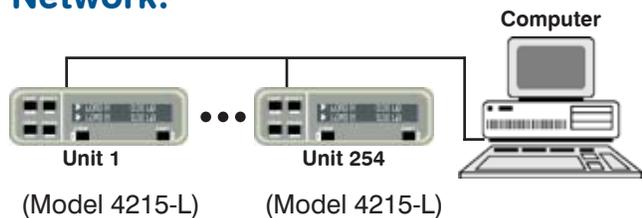
- 4 - 20 mA output
- Rugged carry handle
- **dataView-LVDT** Software
- Custom-programmed math functions & algorithms
- Communicate with up to 254 Model 4215-L units on a single serial communication bus!
- DC strain gage channel (s)
- Quadrature encoder channel (s)

### dataView-LVDT Software Ready!

- Standard unit is **dataView-LVDT** Ready for graphical user interface and connection to PC.
- **dataView-LVDT** software operates at full speed for single and dual-channel real time data acquisition.



### Network:



The Model 4215-L Smart Indicator connects to a wide variety of LVDT's and strain gage transducers.





**Electro Standards Laboratories**  
ADVANCED SYSTEMS DESIGN & SERVICES



## Specifications: Model 4215-L LVDT Smart Indicator

<b>Transducer Interface</b>	<b>Digital Interface</b>
<i>Excitation:</i> - AC 1.5 kHz (std), 3 kHz, others available - 3 VRMS - 7 VRMS (Available) - 4-Wire LVDT Interface (Std.) - 3-Wire LVDT Interface, (Available)	- Vacuum Tube Fluorescent Display - Automatic Span Adjustment and Scaling - Automatic Decimal Point Adjustment - Maximum Display Count $\pm 999,999$ Std. - Resolution: 24 Bits - Linearity: 0.05%
<b>Push Buttons</b>	<b>Serial Port Interface</b>
6 Smart Push Buttons: - Two Buttons for displayed item and displayed units selection - Tare - Peak and Hold Reset - Alternate Display View - Print <i>All Menu Buttons have alternate functions for setup menus</i>	- RS 232 or 485
	<b>Limit Switches</b>
	- Digital Outputs for Over / Under Limits - Solid State Relay Interface
	<b>Calibration</b>
- mV/V/m inch, Known Position	
<b>Analog Output (s)</b>	<b>Position Encoder Interface</b>
- D/A Analog Output - Scalable $\pm 10$ V, 4-20mA optional - Single and Dual Channels - 16-Bit Resolution	- Quadrature Encoder (4 x number of lines) - Single-Ended or Differential Signals - 12 VDC or 5 VDC Power - Dual Quadrature Encoder, (Available)
<b>Transducer Channels</b>	<b>Hardware Auto Identification</b>
- Model 4215-L is a 2 Channel unit	- Plug and Play Operation - Hardware Auto Identification for 25 LVDT's
<b>Remote Operation</b>	<b>Programmed Operations Include:</b>
- Full Remote Operation via Serial Port - Basic Control via Digital Inputs - Optional DataView Software link from PC	- Peak Hold and Tracking - Programmable Math and Function Channels - Programmable Limits - Variety of Engineering Units (including in, cm, % ) - Position Indication - Velocity Indication - Accepts User Parameter Inputs - Menu Scrolling - Auto Zero
<b>Mechanical</b>	
- Size: 10" W x 2.5" H x 13.5" D - Weight: 7 lbs.	

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