



• USB COMMUNICATIONS PORT  
• TEDS-Tag™

## SPECIFICATIONS MODEL 4215

Single Channel Unit: Cat. No. 513872  
Dual-Channel Unit: Cat. No. 304217

# Model 4215 Smart Indicator

The Model 4215 is an intelligent microprocessor based instrument designed for the measurement and control of strain gage transducer based systems. It combines force channels, encoder position channels, print capabilities, and RS 232/485 serial communications into a versatile platform that can be customized to deliver the most powerful and affordable instrumentation in its class.

The Model 4215 is compatible with most tensile testers, load cells, extensometers, torque transducers, pressure sensors and position encoders.

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



### Standard Features:

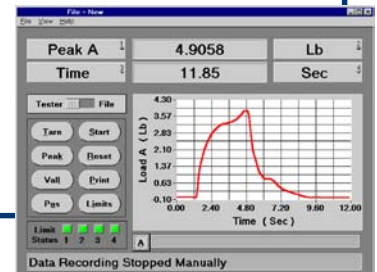
- Fully Bipolar Range +/- 999,999 display.
- 24-bit resolution.
- Nonlinearity 0.005%.
- 2-line X 20-character vacuum fluorescent display.
- TEDS-Tag™ Auto Load Cell Identification.
- User input text label on second line of display.
- Auto setup for 25 load cells.
- Front panel shunt calibration with two selectable resistors.
- Functions include: peak / valley / hold / tracking / peak reset.
- Quad limits output: independent, isolated solid state relays, controls AC or DC signals.
- Six user selectable filters.
- Tri-state limit display: on, off, disabled.
- Automatic display unit conversion: Lb, Kg, N, Psi, Mpa, Klb, Kn, t.
- 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.
- Quadrature encoder channel for position and rate readout.
- Single channel unit has two-line operation for simultaneous display of two quantities.

### Available Features:

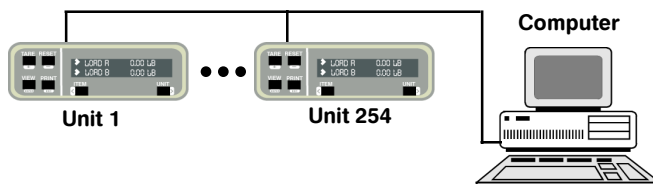
- 4 - 20 mA output.
- Rugged carry handle.
- Two channel option available.
- Two channel units are standard with simultaneous read.
- Two channel unit has two independent lines of 20 character display for simultaneous viewing of both channels (std for 2-ch unit).
- USB Communications Port.

### dataView Software Ready!

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



### Network Application:



The Model 4215 Smart Indicator connects to a wide variety of tensile testers, extensometers, torque transducers, and other strain gage transducers.



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



# Specifications: Model 4215 Smart Indicator

<b>Transducer Interface</b>	<b>Digital Interface</b>
<p><i>Input:</i> <math>\pm 4.5</math> mV/V          Other ranges available  <i>Excitation:</i> Selectable 5 or 10 VDC.  <i>Current Drive:</i> 180mA          Strain Gage Compatible</p>	<ul style="list-style-type: none"> <li>- Vacuum Tube Fluorescent Display</li> <li>- Automatic Span Adjustment and Scaling</li> <li>- Automatic Decimal Point Adjustment</li> <li>- Maximum Display Count <math>\pm 999,999</math> Std.</li> <li>- Resolution: 24 Bits</li> <li>- Linearity: 0.01%</li> </ul>
<b>Push Buttons</b>	<b>Serial Port Interface</b>
<p>6 Smart Push Buttons:</p> <ul style="list-style-type: none"> <li>- Two Buttons for displayed item and displayed units selection</li> <li>- Tare</li> <li>- Peak and Hold Reset</li> <li>- Alternate Display View</li> <li>- Print</li> </ul> <p>All Menu Buttons have alternate functions for setup menus</p>	<ul style="list-style-type: none"> <li>- RS 232 or 485</li> </ul>
	<b>Limit Switches</b>
	<ul style="list-style-type: none"> <li>- Digital Outputs for Over / Under Limits</li> <li>- Solid State Relay Interface</li> </ul>
	<b>Calibration</b>
<ul style="list-style-type: none"> <li>- Shunt Check, mV/V, Known Load</li> </ul>	
<b>Analog Output</b>	<b>Position Encoder Interface</b>
<ul style="list-style-type: none"> <li>- D/A Analog Output</li> <li>- Scalable <math>\pm 10</math> V, 4-20mA optional</li> </ul>	<ul style="list-style-type: none"> <li>- Quadrature Encoder (4 x number of lines)</li> <li>- Single Ended or Differential Signals</li> <li>- 12 VDC or 5 VDC Power</li> </ul>
<b>Transducer Channels</b>	<b>Hardware Auto Identification</b>
<ul style="list-style-type: none"> <li>- 1 to 2, 1 Std., 2nd Channel optional</li> </ul>	<ul style="list-style-type: none"> <li>- Hardware Auto Identification for 25 Transducers</li> </ul>
<b>Remote Operation</b>	<b>Programmed Operations Include:</b>
<ul style="list-style-type: none"> <li>- Full Remote Operation via Serial Port</li> <li>- Basic Control via Digital Inputs</li> <li>- Optional DataView Software link from PC</li> </ul>	<ul style="list-style-type: none"> <li>- Peak Hold and Tracking</li> <li>- Programmable Math and Function Channels</li> <li>- Programmable Limits</li> <li>- Variety of Engineering Units (including lbs, kg, N, Psi )</li> <li>- Position Indication</li> <li>- Velocity Indication</li> <li>- Accepts User Parameter Inputs</li> <li>- Menu Scrolling</li> <li>- Auto Zero</li> </ul>
<b>Mechanical</b>	
<ul style="list-style-type: none"> <li>- Size: 10" W x 2.5" H x 10.5" D</li> <li>- Weight: 6 lbs.</li> </ul>	

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