

## CellMite® LVDT AC Excitation Dual Channel Intelligent Digital Signal Conditioner

The Model 4338-200 Dual Channel CellMite® LVDT digital signal conditioner connects directly to two standard AC LVDT (Linear Variable Differential Transformer) transducers and simultaneously generates a serial output for connection to a PC, and a  $\pm 10\text{VDC}$  analog output. The CellMite® LVDT can be operated with a computer or simply setup by a computer and then used as a stand-alone intelligent LVDT digital signal conditioner with analog output. The Model 4338-200 CellMite® LVDT has on board storage for up to three calibrated LVDT's, each with integrated 6-point calibration that can be used to linearize the LVDT outputs. Its multidrop RS232/RS485 serial port and simple command set allow for connection of multiple units in a serial network configuration. This compact unit is ideally suited for in-situ transducer conditioning and distributed process measurements.



Model 4338-200 features include non-volatile memory for parameter and calibration storage, the ability to select between 3 stored LVDT calibrations, and automatic LVDT identification using TEDS-Tag® technology. Solid state relay switches, multi-point and mV/V calibration, and the ability to locate LVDT core null position are incorporated into the unit. Internal generation of precision sine wave AC excitation voltages, remote sense excitation, and 24-bit internal resolution with 16-bit analog output are also standard.

### Features:

- Dual Channel (Model 4338-200)
- 2-pt, mV/V Calibration
- 6-pt Linearization Calibration
- Scalable  $\pm 10\text{VDC}$  Analog Output
- 16-Bit Analog Output
- Direct to PC with RS232 Data
- Internal 24-Bit Resolution
- Multiple Filter Selections
- Memory Storage for Three Calibrated Transducers
- Selectable Sensor Gains
- Remote Sense Excitation
- Addressable for Serial Network
- Tare, Peak, Valley.
- Unit Support: In, Cm, mm, %, Lb, Kg, N, mV/V, User Defined.
- TEDS-Tag® Auto Identification
- Power Supplies Internally Isolated

- Graphical User Interfaces (GUI) and Software Drivers sold separately. Select from:
  - CellView Lite GUI ( Cat. No. 514569)
  - CellView Multi-Unit Display GUI (Cat. No. 514424)
  - CellView w/Graphing GUI (Cat. No. 514358)
  - Software Drivers (Cat. No. 514864)

### CellMite® 4338-200 LVDT Specifications:

#### Excitation:

Voltage: 3kHz, 3Vrms (std)  
Sensors: LVDT's AC Bridges

#### Operation:

Internal Resolution: 24-bit.  
Input Range: software adjustable from  $< 10\text{mV/V}$  to  $> 100\text{mV/V}$   
Conversion Rate: 60 per second single channel only  
7.5/sec dual channel

Error:  $0.05\% \pm 1$  count  
Precision Shunt:  $60\text{K}\Omega$  for bridge applications  
Pushbuttons: Tare, Shunt  
Indicator: Status LED

#### Outputs:

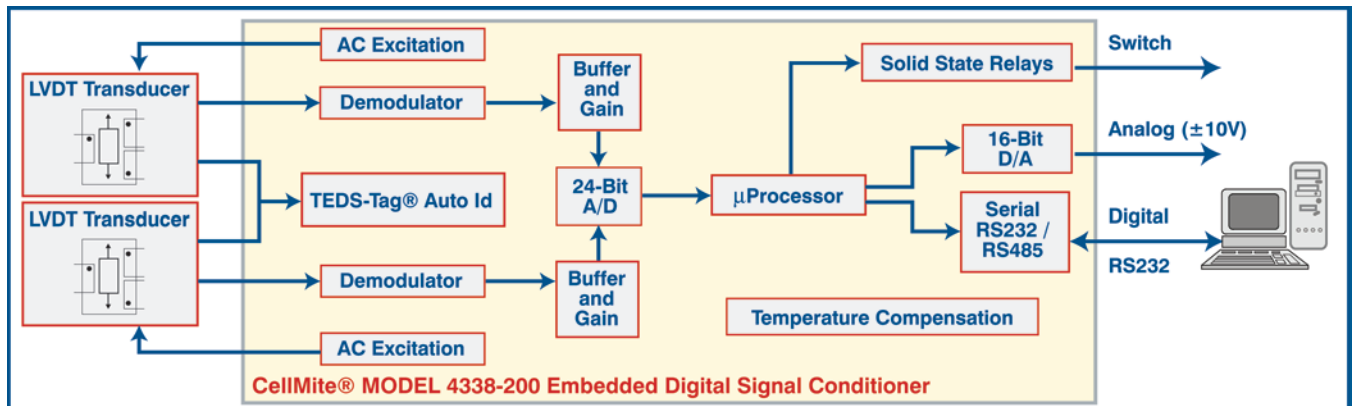
Analog: 16-bit, Scalable,  $\pm 10\text{V}$ .  
Serial Data: Multi-drop RS232, RS485  
Switch: Dual Solid State Relays

#### Power

Included Adapter: 5 VDC, 0.6 A (std), 110/240VAC, 60/50 Hz.  
Optional Adapter: 12, 24, 48 VDC

#### Mechanical:

Size: 6" x 2.75" x 1.2" (15.2 x 7.02 x 3.0 cm)  
Weight: 8.2 oz. (235 g)

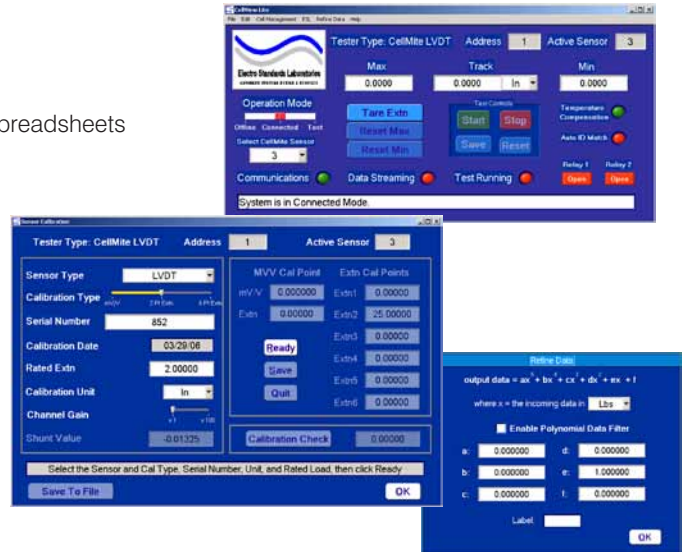


- Graphical User Interfaces (GUI) and Software Drivers sold separately. Select from:
  - CellView Lite GUI ( Cat. No. 514569)
  - CellView Multi-Unit Display GUI (Cat. No. 514424)
  - CellView with Graphing GUI (Cat. No. 514358)
  - Software Drivers (Cat. No. 514864)

### CellView Lite GUI Software (Cat No. 514569)

**Features:**

- Turnkey data acquisition system
- Save data, calibration, and sensor test information to Excel spreadsheets
- Guides user through sensor calibration
- Guides user through adding/removing CellMite® LVDT units.
- Ability to individually name Model 4338-200 units.
- Tare and reset peak and valley for the sensor.
- Save/Load the Model 4338-200 unit and sensor setup information.
- Set output data with user defined 5<sup>th</sup> order polynomial function.
- Setup a test to start and/or stop automatically
- Control Model 4338-200 solid state output relay switches.
- User programmable analog output voltage range.
- Units of In, Cm, mm, %, Lb, Kg, User Defined.



### CellView Multi-Unit Display GUI Software (Cat No. 514424)

**Features:**

- Turnkey simultaneous data acquisition system for networked CellMite® and CellMite® LVDT units.
- Supports mix and match of CellMite® and CellMite® LVDT units on network.
- Ability to define 8 simultaneous data displays from multiple channels on multiple units.
- Save data, calibration, and sensor test information to Excel spreadsheets for all networked units.
- Guide user through sensor calibrations.
- Guides user through adding/removing networked CellMite® and CellMite® LVDT units. (Up to 8)
- Ability to select and name any networked units.
- Tare and reset peak and valley for the sensors.
- Save/Load units and sensor setup information.
- Set output data with user defined 5<sup>th</sup> order polynomial function.
- Setup a test to start and/or stop automatically with user selectable trigger events and delayed triggering.
- Multi sample rate data acquisition via user definable logging profile.
- User programmable analog output voltage range for attached CellMite® and CellMite® LVDT units.
- Units of In, Cm, mm, %, Lb, Kg, mV/V, and User Defined.



### CellView with Graphing Software (Cat No. 514358)

**Features:**

- Real time graphing.
- Point and click operation of CellMite® units.
- Guides user through calibration.
- Save/Load CellMite® unit and sensor setup.
- Setup a test to start and stop automatically.
- Save data, calibration, and sensor test to spread sheets.
- Control output relays.
- Units of Lb, Kg, In, Cm, %, and User-Defined.

