

## **CellMite® Board with Auto Identifying Display** **Embedded Digital Signal Conditioner Board for Strain Gage Sensors**

### **Features:**

- Auto Identifying Display
- 2-pt mV/V Calibration
- 6-pt Linearization Calibration
- Scalable  $\pm 10V$  Analog Output
- 16-bit Analog Output
- Direct to PC with RS232 Data
- 24 Bit Resolution
- Multiple Filter Selections
- Storage for Three Calibrated Transducers
- Remote Sense Excitation
- Addressable for Serial Network
- Tare, Peak, Valley
- Unit Support: Lb, Kg, N, In, cm, mm, %, mV/V, User Defined
- TEDS-Tag™ Auto Identification
- Power Supplies Internally Isolated
- CellView Lite Graphical User Interface (GUI) Option
- CellView Multi-Unit GUI Option
- CellView Software Drivers Option

The CellMite® Model 4327 Board with auto identifying display is an embedded digital signal conditioner board from Electro Standards Laboratories that connects directly to a standard strain gage transducer and simultaneously generates a serial output for direct connection to a PC, a scalable  $\pm 10V$  analog output for interface to data acquisition systems, and a 16-character auto identifying display for direct readout viewing. The Model 4327 has on board storage for three calibrated sensors, each with integrated 6-point calibration and independent user specified display setup parameters. When a TEDS-Tag™ capable sensor is connected to the unit, that sensor is immediately identified by the Model 4327 and its stored calibration data and display configuration are automatically loaded. If that sensor is removed and another TEDS-Tag™ sensor is connected, then its calibration data and display data are automatically loaded. Unlike other units in its class, auto sensor identification and auto display identification require no user intervention and prevent field personnel from making costly mistakes due to incorrect sensor calibration or display setup.



The CellMite® Model 4327 can be fully operated with a computer or simply setup by a computer and then used as a stand alone intelligent digital signal conditioner with auto identifying analog and alphanumeric display outputs.

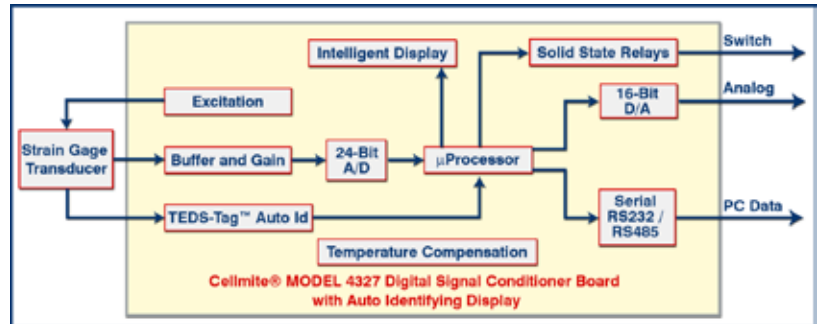
The CellMite® Model 4327 integrates an intelligent 16 character backlit alphanumeric display with a CellMite® Model 4325B. The wide range numerical readout features 6 full digits of display plus sign indicator and decimal point along with a unit of measure label and channel identifier. The Model 4327 automatically converts between a variety of scientific units including Lbs, Kg, cm, mm, and mV/V and can output these to display. The location of the decimal point and unit of measure are setup via software but the computer is not required during operation.

The CellMite® Model 4327 has a multi-drop RS232/RS485 serial port that allows 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. It provides OEM user and system integrators with an affordable and complete strain gage-to-PC solution with intelligent display readout that is not found on competitive units.



The Model 4327 features include nonvolatile memory for parameter and calibration storage, ability to select between 3 stored calibrations, automatic sensor identification using TEDS-Tag™ technology, solid state relay switches, multi-point and mV/V calibration, remote sense excitation, and 24-bit internal resolution with 16-bit analog output.

When used in combination with the Electro Standards Laboratories CellView family point-and-click GUI (Graphical User Interface) software, a turnkey data acquisition system is formed that can generate Excel compatible data files. The software also supports multiple units in a serial data network configuration and mix and match operation with the Electro Standards Laboratories Model 4331-200 two-channel CellMite® LVDT embedded digital signal conditioner boards. This allows the construction of mixed DC excited and AC excited sensor networks under a single software umbrella.



### CellMite® Model 4327 Specifications:

#### Excitation:

Voltage: 5 VDC  
Nom. Load: 350 ohm bridge

#### Operation:

Internal Resolution: 24-bit.  
Input Range: \_\_\_\_\_ +/-5.5 mV/V (std)

Conversion Rate: 60/sec.  
Error: 0.01%, ±1 count  
Pushbuttons: Tare, Shunt  
Precision Shunt: 60K Ohm  
Indicator: status LED  
Display Range: +/-999999.

#### Outputs:

Analog: 16-bit, Scalable, ±10V  
Serial Data: Multi-drop RS232, RS485  
Switches: Dual solid state relays  
Display: 16-character backlit LCD

#### Power:

5 VDC, 0.6A (std)

#### Mechanical:

Board Size: 3" x 1.5" x 0.5"  
Weight: 0.9 oz. (25.5 g)  
Display Size: 4.75" x 1.25" x 0.6"  
Weight: 0.2 oz. (57 g)

### CellView Lite GUI Software Option (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 networked M4327 units.
- Ability to select any networked M4327 unit
- Ability to individually name M4327 units
- Tare and reset peak and valley for the sensor
- Save/Load the M4327 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 M4327 solid state output relay switches
- User programmable analog output voltage range
- Units of In, Cm, mm, %, Lb, Kg, User Defined
- Setup LCD display

