

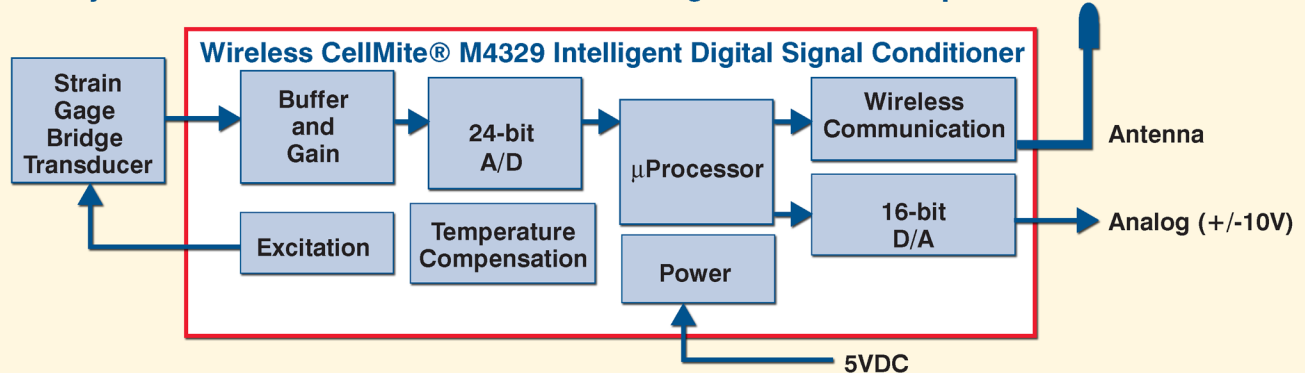
CellMite® Model 4329 Wireless Intelligent Digital Signal Conditioner

Features:

- Model 4329 connects directly to a standard strain gage, load cell, extensometer, or pressure transducer.
- Wireless communication to 1500 feet.
- Wireless network with up to 8 CellMites®, no cables needed.
- Simplified distributed process measurements.
- Model 4329M Master CellMite® directly connects to a PC with RS232 - USB.
- Monitor and control networked units with Graphical User Interface. (GUI).
- +/- 10V analog output can be used for local indication and control.
- Simultaneous analog output and wireless communication.
- Din Rail mount available.



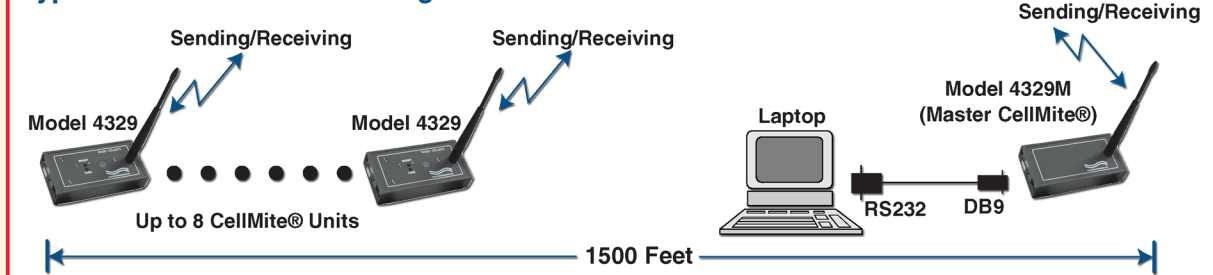
Ideally suited for in-situ transducer conditioning and distributed process measurements!



CellMite® features a nonvolatile memory for parameter and calibration storage, the ability to select between three transducers, multi-point and mV/V calibration, remote sense excitation, and a 24-bit internal resolution with 16-bit analog output.

CellMite® compensates for transducer nonlinearities using its integrated 6-point calibration. Its wireless communication port and simple command set allow connection of up to 8 units in a wireless serial network configuration.

Typical Wireless Network Using CellMite® Model 4329





Electro Standards Laboratories

ADVANCED SYSTEMS DESIGN & SERVICES



CellMite® Model 4329 Specifications

Excitation:

Voltage: 5 VDC. Nom. Load 350 Ω.

Operation:

Input Range: +/-5.5 mV/V.

Conversion Rate: 60 per second.

Tare, Peak, Valley

Precision Shunt 60K

Outputs:

Analog: 16-bit, Scalable, +/-10V.

Serial Data: Multi-drop RS232.

Storage:

For 3 calibrated load cells.

Calibration Options:

2 pt, mV/V Calibration.

Calibration:

6 pt. Linearization Cal., 2 pt. Shunt.

Units:

Lb, Kg, In, Cm, %, User-Defined

Temperature:

Internal Temperature compensation.

Relay:

Solid State.

Resolution:

24-bit internal resolution, error 0.01%, +/- 1 count.

Mechanical:

Size: 5.5" x 2.75" x 1.2".

Weight: 8.9 oz. (252g).

Din Rail mount available.

Power:

5 VDC (+/-10%), 230mA.

(Included Adpater) 110/240VAC, 60/50 Hz

Compatible with

4 x AA NiMH Rechargeable Batteries

Included:

Manual on CD Rom

Wireless Operation:

Nominal Frequency 900 MHz

Classification: Mobile

This device complies with Part 15 of the FCC Rules.

CellView Lite Graphical User Interface (GUI)

Features:

- Guides user through adding/removing CellMite® units.
- Stores calibration data for three sensors.
- Guides user through sensor calibrations.
- Tare and reset peak and valley for the sensor.
- Set output data with a quadratic filter.
- Save/Load the CellMite® unit and sensor setup information.
- Setup a test to start and/or stop automatically.
- LEDs indicate operational status of the GUI.
- Save data, calibration, and sensor test information to spreadsheets.
- Control output with relay switch.
- User programmable analog output voltage.

The image displays several overlapping windows from the CellView Lite GUI:

- Add Cell:** A window for adding a new cell, featuring a text field for "Cell Address" (set to 1) and an "Add Cell" button. A note at the bottom says "Click Add Cell to System button".
- Refine Data:** A window for configuring a quadratic filter. It shows the formula $output\ data = ax^2 + bx + c$ and a checkbox for "Enable Quadratic Data Filter" which is checked. The "Based on Unit" is set to "Lbs". The coefficients are: a: 1.000000, b: 1.000000, c: 2.000000. The "Label" is "JJJK".
- Test Controls:** A central panel with four buttons: "Start" (green), "Stop" (red), "Save" (blue), and "Reset" (yellow).
- Sensor Setup:** A large window for configuring a sensor. It shows "Cell Address" (1) and "Active Sensor" (2). It prompts to "Enter Sensor Setup information and click Activate Setup". The "Sensor Settings" section includes "Serial Number" (741) and "Display Precision" (0-5). The "Sensor Analog Output" section includes "Zero Load/Extn Voltage" (3.00), "Max Load/Extn Voltage" (10.00), and "Min Load/Extn Voltage" (-2.00). The "Base %" section includes "Base Length" (6.00) and a unit dropdown (In). Buttons for "Load Setup", "Activate Setup", and "Save Setup" are at the bottom.
- CellView Main:** The main interface showing "Connected CellMite Address" (1) and "Active Sensor" (1). It has fields for "Peak" (0.00000), "Track" (0.00000), and "Valley" (0.00000). It includes "Operation Mode" (Offline, Connected, Test), "Select CellMite Sensor" (1), "Communications" (Data Streaming, Test Running), and "Relay 1" / "Relay 2" (Open, Open) buttons. A status bar at the bottom says "Sensor changed."