Electro Standards Laboratories
ADVANCED SYSTEMS DESIGN & SERVICES

MADE IN USA

SPECIFICATIONS
MODEL 4349
Cat. No. 304349

CellMite® ProD Ruggedized High Performance Embedded Data Acquisition and Sensor Monitoring Node

- **Ideal for high traffic network applications. Has extended buffering.**

The CellMite® ProD Model 4349 is a **high performance data acquisition and sensor monitoring** module from Electro Standards Laboratories that is suitable for embedded applications that require a ruggedized high speed analog and digital data acquisition unit that is accessible via an Ethernet network.

The Model 4349 creates both a low speed monitoring data stream and a high speed transient event data stream that are designed to measure and report both static and pulsed sensor events. Typical sensors can include load cells, temperature sensors, strain gages, general analog outputs, voltages, currents, pulse counting, and digital contacts. Complex systems can be monitored by using a multitude of CellMite® ProD Model 4349 boards as Ethernet monitoring nodes within an Ethernet network.

The CellMite® ProD features 11 channels of 12-bit analog inputs that can be sampled up to 10,000 samples/second. Digital data acquisition is also supported with 64-bits of simultaneously sampled digital inputs, 4-bits of isolated digital inputs, and 3 digital counter inputs that are also sampled at up to 10,000 samples/second. The high sampling rates make the Model 4349 perfect for recording important sensor data from transient applications such as pulsed power systems.

Direct PC or network communication is supported by a 10/100 BaseT Ethernet data channel with user selectable event and monitor data packet size in order to minimize network congestion. The communication channels are optically isolated in order to minimize system ground loops. For applications requiring on-board data storage, the CellMite® ProD features 750K Words of onboard memory that can be used to buffer transient event data. The CellMite® ProD features a wide input voltage range of 19VDC-36VDC, along with 3kVDC isolation. The CellMite® ProD is designed for ruggedized applications and is designed to operate from -40C to +85C.

APPLICATIONS Include:

- High speed data logging
- Recording pulsed sensor events
- Multiple data stream monitoring
- Multi-rate & mixed signal data recording
- Recording transient data triggered by events

SPECIFICATIONS:

Analog Signal Inputs:
Analog Input: Very high impedance differential
Input Range: +/- 10V
Resolution: 12-bits
Number of Channels: 11
Max. Sampling Rate: 10,000 samples/second, all channels

Digital Signal Inputs:
Input type: Logic, TTL, and HC compatible with hysteresis
Number of Channels: 64 bits, simultaneously sampled
Max Sampling Rate: 10,000 samples/second

Digital Counter Inputs:
Excitation: 5 VDC
Interface: Single ended TTL, compatible
Type: Pulse
Channels: 3
Resolution: 8-bits

Digital Isolated Inputs:
Type: Optically Isolated
Channels: 4

Digital Trigger Input:
Type: Digital trigger
Source: Any digital input

Ideal for Commercial Off-the-Shelf (COTS) Application

Input Power:
Range: 19VDC-36VDC, std, 4.5VDC-9VDC, Others
Power: 8.5W (Ex. 300 mA at 28 VDC)

Indicators:
Discrete: Dual LEDs

Mechanical:
Size: 7.5" x 5.5" x 1"
Mounting: 7 mounting holes
Signal Connectors: 2mm ribbon
Environment: Operating -40°C to +85°C

Communications Interface:
Interface Types: 10/100Base-T Ethernet with **flow control**
Isolation: Optical

Monitor Data Format (Continuous Monitoring):
Data Packet: Selectable to 20 bytes
Data Packet Rate: 0.1 Hz to 10 Hz
Data Stream Type: Data Push (continuous monitoring)
Data Content: User Specified Analog, Digital, Counter data

Event Data Format (Transient Event Monitoring):
Data Packet: Selectable to 20 bytes
Data Sample Rate: 10 Hz to 10,000 Hz
Transmit Packet Size: Selectable
Data Stream Type: Triggered Data Push / Data Pull
Data Content: User Specified Analog, Digital, Counter data
Buffered Data Storage: 750K Words

Ordering:
Model 4349, Catalog No. 304349

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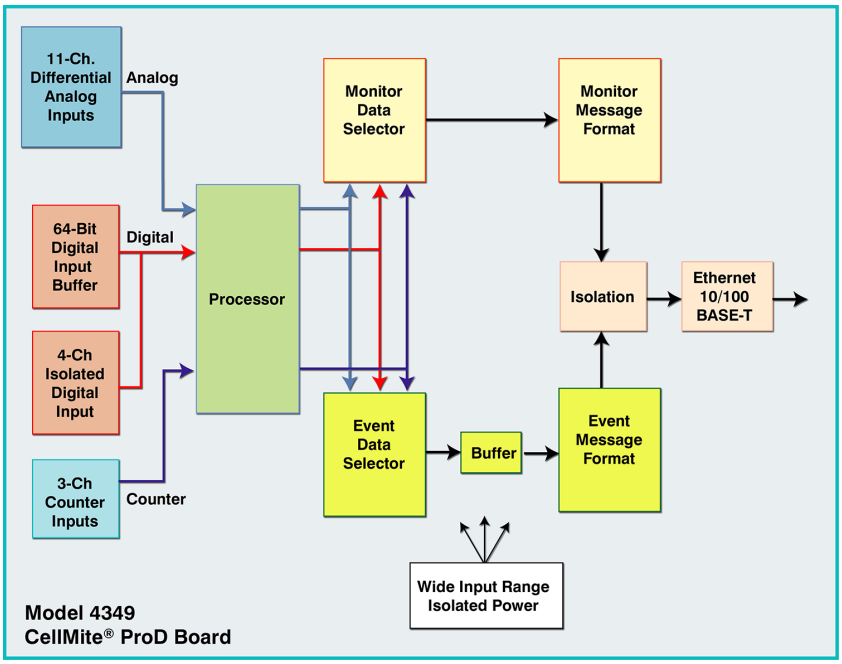

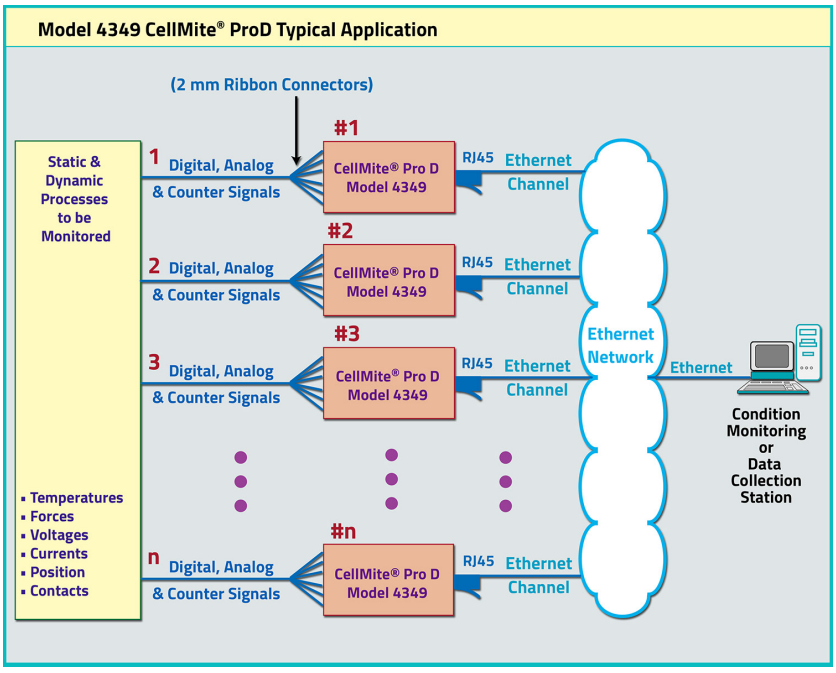

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