Features and Advantages

Effective
- Provides an effective and useful research grade fuel cell or battery analysis tool

Stackable
- Can be daisy chained with multiple CVMs to provide up to 512 channels (virtually unlimited with USB)
- Provides a flexible solution for small to large fuel cell stacks, battery research, and other research applications

Easy to Configure and Operate
- Easily configured using FuelCellsEtc’s CVM Analysis software to support different communication protocols, alarm trip-points, manipulate I/O, etc. for easy integration with other software or systems

Extensive Communications Capabilities
- USB, serial (RS-232/485), CAN bus

Temperature Measurement
- Two K-Type thermocouples directly with cold-junction compensation

Power Flexibility
- External 8—30 VDC input or USB port powered
Specifications

- **USB (Universal Serial Bus)**
  USB v2.0 high speed device; bus powered

- **CAN (Controller Area Network)**
  Up to 16 possible slave addresses

- **RS-232/RS-485 Serial Interface**
  Modbus Available

- **32-Channel Isolated Analog Input**
  ±63μV resolution (16-bits)
  0.05% Accuracy (NIST Calibrated)
  ±2 VDC range/channel
  5 kHz sample rate (full 32 channels)
  1 kV Isolation
  85 VDC Common Mode Rejection

- **2 K-Type Thermocouple Inputs**
  0°C to 1024°C temperature range
  0.25°C resolution
  Internal Cold junction compensation

- **Additional Analog Inputs (Optional)**
  14-Channels
  10 bit resolution
  0—2.048 VDC (5 VDC tolerant)

- **Additional Digital I/O (Optional)**
  16-Channels
  Independently configurable as I/O
  3.3 VDC logic level (5 VDC tolerant)

- **On-Board Logging**
  Supports data logging to microSD card as a CSV file for analysis at a later date

- **Configuration Software**
  Included software application allows you to set up, log, and analyze up to 16 CVMs in one application

- **Software Development Tool-Kit**
  Provided SDK allows developers to develop custom software applications DLL’s and LabView VI’s available

- **Power**
  USB powered or 8—30 VDC external DC
  Less than 2.5 watts total power

- **Dimensions**
  4.7” x 4.1” x 1.2” (121 x 104 x 32 mm)
  0.55 lb (250 g)