

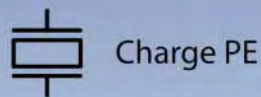
# OASIS 2000



Configure multiple sensor interface  
with Endevco's **OASIS 2000**  
providing maximum **flexibility** with assorted  
**high performance** signal conditioner cards  
and seamlessly integrated using  
Windows®-based controlling software.

ENDEVCO  $\Sigma$

**Optimal Architecture Sensor Interface System**



Charge PE



ISOTRON®



Quarter  
Bridge PR



Half  
Bridge PR



Full  
Bridge PR



AC



DC



Smart  
ISOTRON®



Smart  
Sensors

## OASIS 2000

Endevco is committed to providing high-quality reliable measurement systems. These products encompass the most advanced technologies that set virtually every industry price/performance standard today. In addition, Endevco offers a broad line of sensors, electronics and measurement software to meet your needs.

- ◆ Robust Software
- ◆ Smart Sensor (TEDS) Capability
- ◆ Mixing of Multiple Card Types
- ◆ Enhanced Database
- ◆ Import/Export Database Files
- ◆ Test Set Up Time Savings

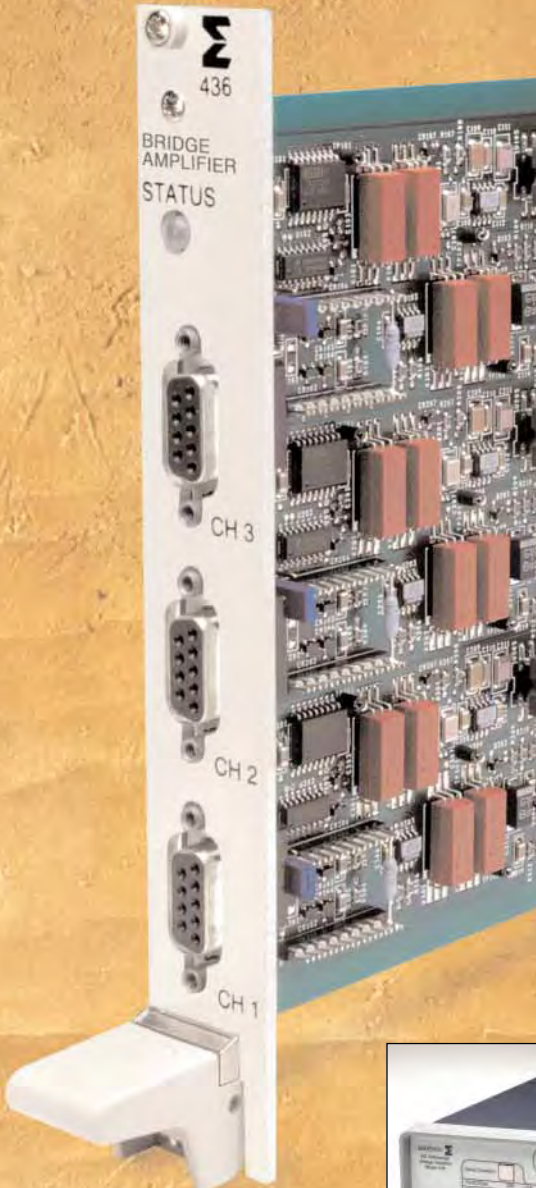
OASIS 2000 allows the interface of multiple sensor types by using the 400 Series modular, family of signal conditioner cards all housed in a 16-slot, 19" rack (Endevco model 4990). 400 Series cards can be mixed or matched in any combination, giving maximum flexibility to customize any system configuration. This system provides high-performance instrumentation at an affordable price.



## Bridge Amplifier

# 436/136

## Flexible 3-Channel Bridge Signal Conditioner



This 3-channel DC Differential Voltage Amplifier is designed for use with piezoresistive accelerometers, pressure transducers, strain gages and the Endevco Microtron® Variable Capacitance accelerometers.

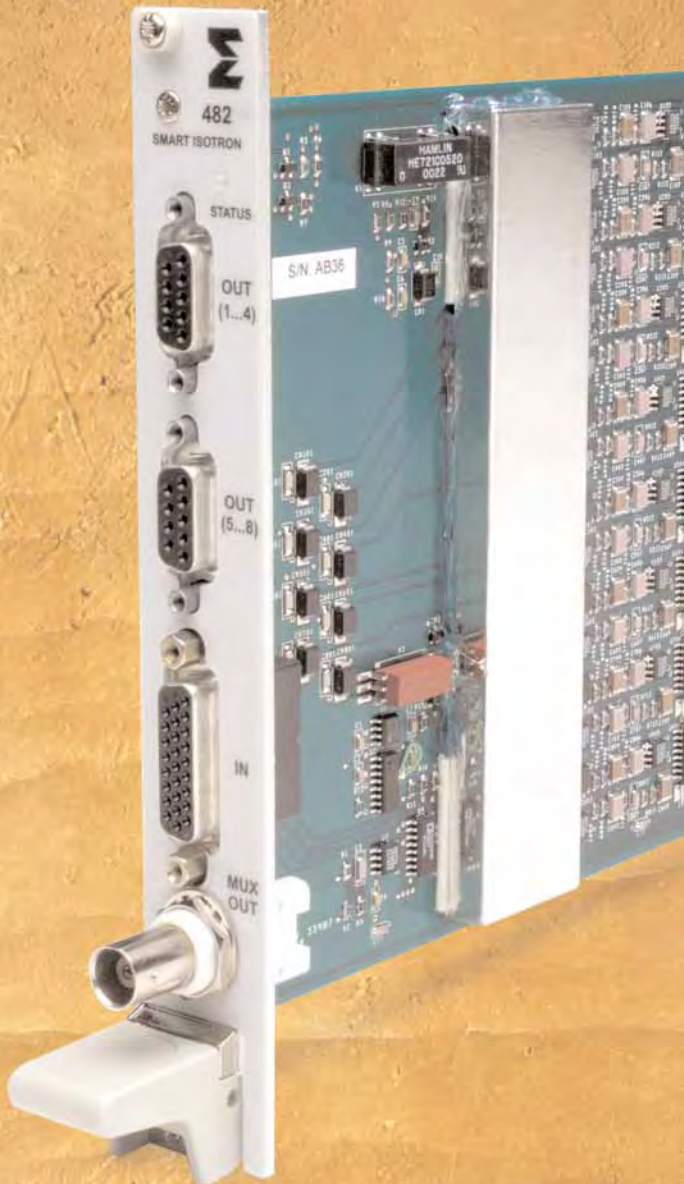
Significant features include:

- ◆ Frequency Response: DC to 100 KHz Bandwidth (-3dB)
- ◆ Auto-Zero and Shunt Calibration
- ◆ Gain Range 0 to 1000
- ◆ Four User-Selected Excitation Levels (0, 5, 10, and 15 VDC)
- ◆ User Selected 4-pole Low Pass Butterworth Filter Corners
- ◆ Gain Auto-Ranging (For Model 436)



### MODEL 136

This benchtop version of the 436 is manually or computer controlled, (via RS-232) designed for portability, with a 12 VDC power option.



# *i*TEDS<sup>TM</sup> TECHNOLOGY

This intelligent 8-channel amplifier card communicates with newly developed Smart i-TEDS Sensors (per IEEE P1451.4 protocol), providing the user the quickest, most reliable and economical means for large-scale testing, yet the card is backwards compatible for use with standard ISOTRON transducers and Remote Charge Convertors.

Significant features include:

- ◆ Programmable Gain: 0 to 100 and Auto-Ranging
- ◆ Capability to Read/Write IEEE P1451.4 TEDS Data
- ◆ Computer Selected 4-pole Low Pass Butterworth Filter Corners (100Hz, 1KHz, 5 KHz and Broadband)
- ◆ Frequency Response 0.1 Hz to 100 KHz (-3dB)
- ◆ Automatic Open/Short Sensor Check
- ◆ Front Panel BNC Output Connector  
- Ideal for Bank Switching
- ◆ 128-Channels per 19-inch Rack

*DIGITAL ID  
FOR ANALOG  
TRANSDUCERS*



482

## i-TEDS/ISOTRON® 8-Channel Signal Conditioner Card

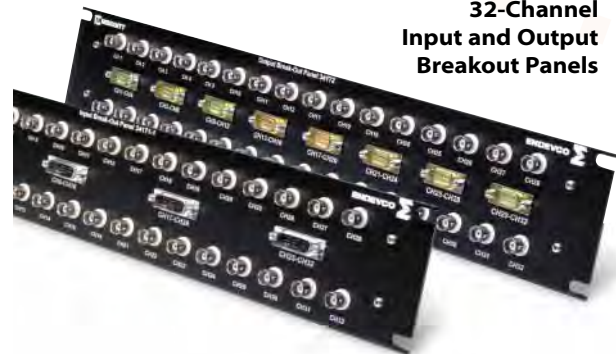
Endevco offers the Smart Sensor user a complete “turn-key” system solution. Significant options include:

- ◆ **OASIS Software** - a powerful, user-friendly system software that not only handles i-TEDS data but also contains data file import/management features that creates “Pseudo-Smart Sensors” from non i-TEDS Sensors.
- ◆ **32-Channel Input and Output Breakout Panels** conveniently converts the card’s “D” connectors to BNC.
- ◆ **Hand Held Programmer** - a portable device to Read/Write TEDS information for i-TEDS Sensors.
- ◆ **Calibration Software, TEDS Editor** - Software and accessories for immediate use to update and overwrite all TEDS data for i-TEDS Sensors, typically performed as part of sensor calibration.
- ◆ **Non i-TEDS Sensor upgrade attachments;** one for Piezoelectric and one for ISOTRON - an in-line module that allows existing inventory to be utilized in an i-TEDS Sensor “environment” at minimal cost.

### Complete System Solutions:

- **Smart Hand Held Programmer, Model 36004**
- **TEDS Editor Kit, Model 36018**
- **32-Channel Input Break-out Panel, Model 36019**
- **32-Channel Output Break-out Panel, Model 36020**

**32-Channel  
Input and Output  
Breakout Panels**



**Hand Held Programmer**

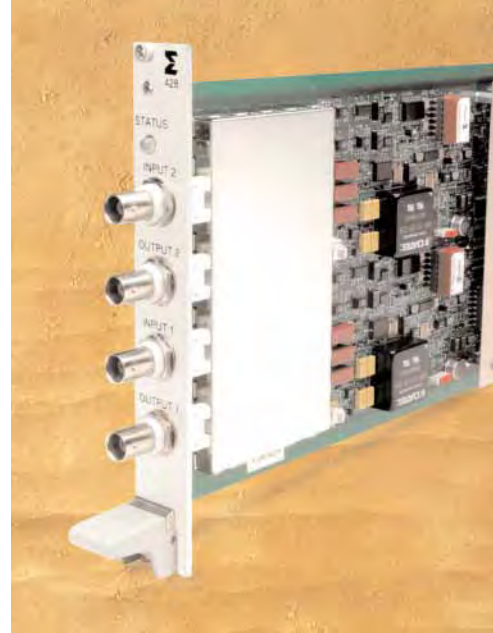
# 428

## High Performance 2-Channel PE/ISOTRON Signal Conditioner

This 2-channel Piezoelectric/ISOTRON Signal Conditioner is a high-performance, amplifier card with computer switchable front-end isolation.

Significant features include:

- ◆ Gain 0 to 10,000
- ◆ 0.5 Hz to 100 KHz (-3dB Corners)
- ◆ Gain Auto-Ranging
- ◆ PE and ISOTRON Sensor Detection
- ◆ BNC Output per Channel
- ◆ Programmable ISOTRON Current (0, 4, or 10 mA)
- ◆ User Selected 4-pole Low Pass Butterworth Filter Corners
- ◆ Filters Meet Requirements for J211 and ISO 6487



# 433/133

## General Purpose 3-Channel PE/ISOTRON Signal Conditioner

This 3-channel Piezoelectric/ISOTRON® Signal Conditioner is a general use card accepting inputs from PE accelerometers, ISOTRON accelerometers and Remote Charge Convertors.

Significant features include:

- ◆ Programmable Gain 0 to 1,000
- ◆ User Selectable 4-pole Low Pass Butterworth Filter Corners
- ◆ Frequency Response from 0.1 Hz to 100 KHz (-3 dB)
- ◆ BNC Output per Channel
- ◆ ISOTRON Open/Short Detection
- ◆ Programmable ISOTRON Current Source (0.4, or 10 mA)
- ◆ M1 Option for Velocity in Metric Units

### MODEL 133

This 3-channel PE/ISOTRON amplifier is manually or computer programmable (via RS-232) for benchtop use with options for Velocity Output and 12 VDC operation.



# 4990

## 4990 Rack

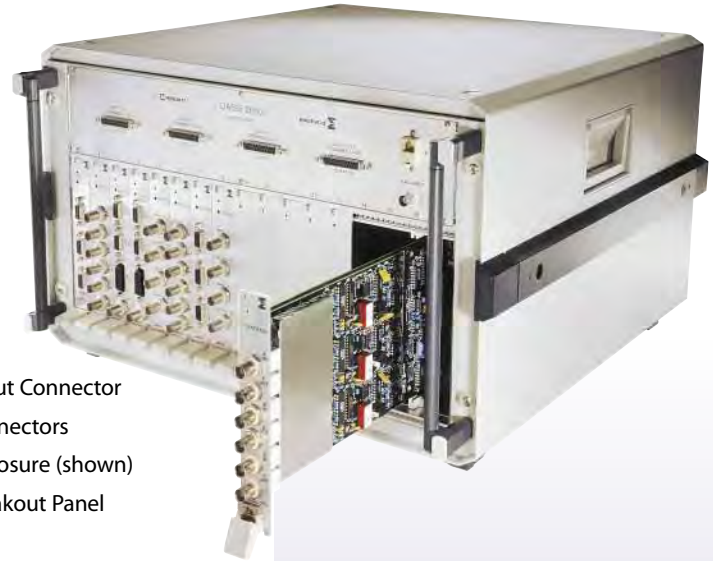
Provides power, computer interface and output connections for Endevo Models 428, 433, 436 and 482. Four panel-mounted 25-pin "D" connectors group the outputs for external data acquisition connection ease. Up to 16 Model 4990 racks can be controlled from a single computer.

Significant features include:

- ◆ Holds from 1 to 16 Cards in Any Mixture of the 400 Series Family
- ◆ Computer Control via Ethernet or RS-232
- ◆ 19" Cabinet-Mounted or Benchtop Enclosure (shown)
- ◆ 6 U Height
- ◆ External Calibration Input for All or Only Selected Channels

### HARDWARE FEATURES

- ◆ Sensor Input Cards
  - 428, A 2-Channel, PE/ISOTRON Amplifier
  - 433, A 3-Channel, PE/ISOTRON Amplifier
  - 436, A 3-Channel, Bridge Amplifier
  - 482, An 8-Channel, i-TEDS ISOTRON Amplifier
- ◆ External Calibration Input Connector
- ◆ Front Panel Output Connectors
- ◆ Optional Benchtop Enclosure (shown)
- ◆ 24-Channel Output Breakout Panel (optional)

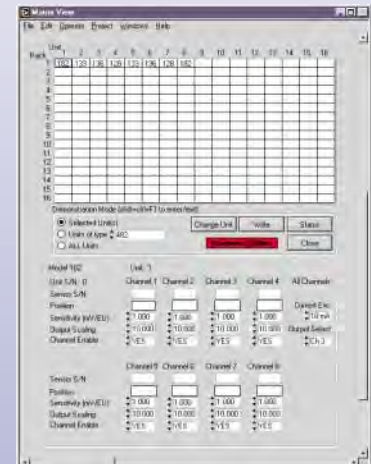


## SW2000 Software

### SOFTWARE FEATURES

This OASIS software SW2000 has numerous features unheard of in system software (available for Windows® 95/98 or NT). The most important features result in tremendous savings in installation time:

- ◆ Sensor Related Information
  - Position or Location on Test Article
  - Sensitivity
  - Make
  - Model
  - Serial Number
  - Cable Number
  - Error Checking: Flags Duplicate Numbers
  - Calibration Date
- ◆ Signal Conditioner
  - Rack Number
  - Slot Number
  - Channel Number
- ◆ Date and Time Stamp
- ◆ Form Creation by Fields
- ◆ Reads and Writes i-TEDS Sensor Data Fields
- ◆ Off-line Mode for Test Set-up without Hardware Connected





We are well known for our many innovations and for being pioneers in the realm of sensors and electronic instrumentation used for vibration, pressure and shock measurements. Unlike other firms, we use many different crystal materials, produce our own piezoelectric elements, connectors, and cables; develop and fabricate MEMS sensors in our own silicon foundry, design and manufacture our own signal conditioning amplifiers in-house.

These commitments have enabled us to control quality every step of the way, and to design products that are smaller in size, wider in temperature range, stronger in survivability and easier to operate. We think this explains why we have experienced continued growth since our founding as a small research and development company in 1947.

We look forward to applying this vast array of resources to the resolution of your dynamic measurement requirements.

**CERTIFIED  
ISO 9001**



applies to manufacturing facilities

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