

# ECU-P1706

# ECU-P1702

# ECU-P1300

**250 KS/s, 16bit, Simultaneous 8-ch Analog input PCI-104**

**10 MS/s, 12bit, Simultaneous 4-ch Analog input PCI-104**

**Vibration Signal Modulate Card**

**NEW**



## Features

- Designed for Smart-Grid Applications
- ECU-P1706 focuses on the Vibration/ Substation Signal Analytics (Wind-Power / Smart Substations)
- ECU-P1702 focuses on the Partial Discharge Detection and Analytical Devices (Smart Substations)
- ECU-P1300 focuses on Vibration Applications (Wind-power / Smart Substations)
- Easy to install to ECU-1871 Energy Controller

### ECU-P1706

## Specifications

### General

- **Power Consumption** Typical: 5V @ 850mA
- **Bus Type** PCI-104
- **I/O Connector** Plug-in Terminal Block
- **Operating Temperature** -20 ~ 70°C (-4 ~158°F)  
@ 5 ~ 85% RH
- **Storage Temperature** -40 ~ 80°C (-40 ~176°F)
- **Storage Humidity** 5 ~ 95% RH,  
non-condensing  
(IEC 60068-2-3)

### Analog Input

- **Channels** 8 differential
- **Resolution** 16 bits
- **Max. Sampling Rate** 250 KS/s
- **FIFO Size** 8K samples
- **Overvoltage Protection** ±30V
- **Input Impedance** 18MΩ
- **Sampling Mode** Software, onboard programmable pacer and external (TTL Level)
- **Trigger mode** Delay To Start Trigger, Delay To Stop Trigger
- **Trigger Source** Analog Trigger, External Trigger
- **Input Range** (V. Software Programmable)

Bipolar	±10V	±5V	±2.5V	±1.25V
Accuracy % of FSR±1LSB	0.04	0.04	0.06	0.08

### Timer Counter

- **Channels** 2
- **Resolution** 32 bits
- **Mode** In: Event counting, Frequency In, PWM In
- **Compatibility** Isolated 24V<sub>DC</sub>
- **Max. Input Frequency** 1 MHz
- **Max. Output Frequency** 1 MHz

## Ordering Information

- **ECU-P1706-AE** 250 KS/s, 16bit, Simultaneous 8-ch PCI-104

### ECU-P1702

## Specifications

### General

- **Power Consumption** 5V @ 700mA (Max.)  
3.3V @ 850mA (Max.)
- **Bus Type** PCI-104
- **I/O Connector** BNC
- **Operating Temperature** -20 ~ 70°C (-4 ~158°F)  
@ 5 ~ 85% RH
- **Storage Temperature** -40 ~ 80°C (-40 ~176°F)
- **Storage Humidity** 5 ~ 95% RH,  
non-condensing  
(IEC 60068-2-3)

### Analog Input

- **Channels** 4 Single-ended
- **Resolution** 12 bits
- **Max. Sampling Rate** 10 MS/s
- **FIFO Size** 32K samples
- **Overvoltage Protection** ±15V
- **Input Impedance** 50 ohm/1M ohm/Hi Z switch selectable
- **Sampling Mode** Software, onboard programmable pacer and external (TTL Level)
- **Trigger mode** Delay To Start Trigger, Delay To Stop Trigger
- **Trigger Source** Analog Trigger, External Trigger
- **Input Range** ±5V, ±2.5V, ±1V, ±0.5V

## Ordering Information

- **ECU-P1702-LAE** 10 MS/s, 12bit, Simultaneous 4-ch PCI-104

### ECU-P1300

## Specifications

### General

- **Power Consumption** Typical: 5V @ 700mA;  
12V @ 100mA
- **Operating Temperature** -20 ~ 70°C (-4 ~158°F)  
@ 5 ~ 85% RH
- **Storage Temperature** -40 ~ 80°C (-40 ~176°F)
- **Storage Humidity** 5 ~ 95% RH,  
non-condensing  
(IEC 60068-2-3)

### Vibration Modulate

- **Channels** 8
- **Input Range** ±5V (Max.)
- **Output Range** ±10V
- **Input Coupling** AC
- **Sensor Current Supply** 4mA ±1%, 24V compliant
- **Precision** 0.1%
- **Drive Ability** 0 ~ 5K
- **Sensor Signal Gain** 1
- **Signal Gain** 1
- **Analog Filter** 8th order Lowpass Bessel Filters
- **Filter Adjustable** 0.1 Hz ~ 25KHz Adjustable by Software Program

## Ordering Information

- **ECU-P1300-AE** Vibration Signal Modulate Card