## Low Pass Filter Accessory for Analog Input ATLF-8A



\* Specifications, color and design of the products are subject to change without notice.

#### **Features**

#### Wide Bandwidth Gain Amplifier Function is installed.

This product has equipped eight differential gain amplifiers. These amplifiers have a wide bandwidth, from DC - 100kHz, when the input gain is 1. These amplifiers can achieve up to 500 times signal gain.

#### The low-pass filter of each channel is installed.

For each input channel, an onboard 4th order lower Butterworth filter can be applied. By changing jumpers, cutoff frequency of the filter can be selected: either a 20Hz cutoff frequency or a 10kHz one. A 20Hz cutoff frequency is useful when the commercial power noise is a main problem of the input signal; a 10kHz cutoff frequency is normally used for an Anti-Aliasing Filter application.

# The temperature sensor that can be used for Hiyasetten amends of the thermo-couple is installed.

This product has equipped a semiconductor temperature sensor. User can use this sensor to get the board temperature. This temperature signal can be used to compensate thermocouple output by software when a thermocouple signal is applied.

#### Easy connection to external signal with M3 screw type terminal blocks.

There are eight M3 screw type terminal blocks for analog input signal. It is also equipped a M3 screw type terminal block for analog output signal of analog G/E-series boards. It is very easy for external connection with the ATLF-8A terminal board. In addition, a D type connector which is same as differential input connector of analog G/E-series boards.

#### **Other Features**

- Easy to connect with the analog G/E series board through a PCB37P, PCB37PS Series (option).
- Up to this two products can be cascaded together to supply up to 16 input channels.
- Either PC power (via CN1) or an external power source can be used to supply power to this product.
- This product can be installed on the DIN rail using the optional DIN rail installation adapter (DIN-ADP1).



It connects with the thermo-couple from the terminal stand on ATLF-8A.



Connect ATLF-8A with an external equipment in cascade connection.

This product is accessories for function expansion that amplification / filters an outside signal to input by being connected to an interface board for A/D conversion.

## Packing List

Accessory Board [ATLF-8A]...1 Power supply connector (MC1,5/3-ST-3,5)...1 User's Manual...1

#### Specifications

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Item	Specifications
Number of input channel	Differential input 8 channels
Input voltage range (Max.)	-10V - +10V
Input gain (Jumper setting)	Gain = 1, Gain = 10 (Adjusting is required), Gain = 100 (Adjusting is required), Gain = 200 - 500 (Adjusting is required)
Input impedance	1MΩ or more
Accuracy	Gain = 1 ±0.05%, Gain = 10 ±0.05%, Gain = 100 ±0.05% *1, Gain = 500 ±0.2% *1
Band width	100kHz (Gain=1)
Filter type	4th order Butterworth filter
Cutoff frequency (jumper select)	20Hz, 10kHz
Temperature sensor's accuracy	±2°C
Warm-up time	15 minutes or more
Current consumption (mm)	5VDC 700mA
Operating condition	0 - 50°C, 20 - 90%RH (No condensation)
External dimension (mm)	105(W) x 230(D) x 25.5(H)
Weight	350g
Supported board	Board for PCI Express AIO-163202UG-PE, AIO-163202G-PE, AIO-123202UG-PE, AIO-123202G-PE, AIO-161601UE3-PE, AIO-161601E3-PE, AIO-121601UE3-PE, AIO-121601E3-PE Board for PCI AD12-16(PC)EV, AD16-16(PC)EV, AD12-16U(PC)EV, AD16-16U(PC)EV, AD12-16(PC)E, AD16-16(PC)E, AD12-16U(PC)EH, AD16-16U(PC)EH

#### Terminal (CH0 - CH7, TB1, TB2) Specifications



### Interface Connector (CN1 - CN3) Specifications

Used connector	37-pin D-SUB connector [F (female) type] DC-37ST-N [mfd. by JAE] equivalent
Lock nut	Screwsize #4-40UNC GM-25HU [mfd. by HONDA] equivalent
Compatible	37-pin D-SUB connector [M (male) type]
connector	(DCSP-JB37PF [mfd. by JAE] equivalent), (747306-1[mfd. by AMP] equivalent), etc

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## **Physical Dimensions**

Shielded Cable with Two 37-pin D-SUB Connectors (Mold Type) : PCB37PS-0.5P (0.5m), PCB37PS-1.5P (1.5m)

Flat Cable with Two 37-pin D-SUB Connectors : PCB37P-1.5 (1.5m)

## **Physical Dimensions**

### DIN rail adapter

\* Check the CONTEC's Web site for more information on these options.

: DIN-ADP1

## **Physical Dimensions**

