

Buffer Amplifier Box for Analog Input Boards ATBA-16L, ATBA-8L



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

Features

Buffered by high speed high accuracy amplifiers

This terminal has equipped high response speed high accuracy amplifiers, the inputted analog signals can be truthfully transferred to our analog input board/card. And because of the high input impedance of buffer amplifiers, the influence applied to the output impedance of signal source can be limited to a very low level.

Crosstalk Prevention

This board/card is used to prevent the crosstalk while analog signals of low response speed sources are being inputted to the analog input board/card.

Compact designing

With its compact designing, you can carry it easily after simply removed the connection cables.

Aluminum Dustproof Cover-Box

The cover-box is lightly designed by using aluminum in consideration of portability.

This product is the Extension box which connects with the analog input board of our company, and extends a buffer amplifier function. By using buffer amplifier, it can be cancelable to the cross talk phenomenon generated when measuring the source of a signal that response speed is slowly. Moreover, when the distance from the source of a signal to an analog input board is long, since the influence of cable length can be suppressed, the stable signal measurement is possible.

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* Visit the CONTEC website to check the latest details in the document.

* The information in the data sheets is as of July, 2022

Specifications

Specifications of ATBA-16L / ATBA-8L

Item	ATBA-16L	ATBA-8L
Analog Input (Buffer Amplifier Part)		
Insulated specification	Un-Isolated	
Absolute max. input voltage	±15V	
Number of Input Channels *1	Single-Ended Input: 16ch or Differential Input: 8ch	Single-Ended Input: 8ch or Differential Input: 4ch
Input voltage range	-10V ~ +10V	
Input Impedance	1MΩ or more	
Non-Linearity error *1	±0.03% of FSR	
CN1 Connector Assignment	The same definition as the used AD board/card ATBA-8L: only CH0 - CH7 have buffer amplifier. (other 8 channels are straight-connected).	
External power supply	5VDC, 0.4A (Max)	5VDC, 0.3A (Max)
Operating Conditions	0 ~ 50°C, 10 ~ 90%RH (No condensation)	
Dimensions (mm)	75(W) x 70(D) x 22(H) (No protrusion)	
Weight	100g	
Supported Products	ADA16-8/2(LPC)L, AD16-16(LPC)L, ADA16-8/2(CB)L, ADA16-8/2(LPC)L, AD16-16(LPC)L, AIO-160802L-LPE, AI-1616L-LPE, AIO-160802L-LPE, AI-1616L-LPE	
Standard	VCCI Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA	CE Marking (EMC Directive Class A, RoHS Directive), UKCA

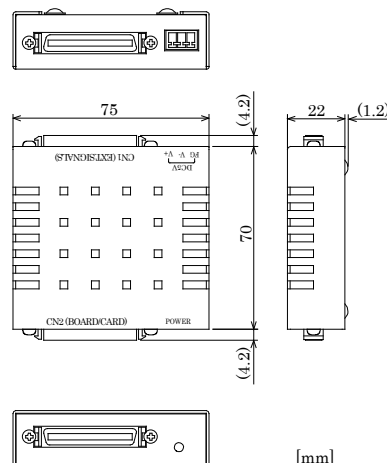
*1 It depends on the number of AD board's/card's input channels.

*2 When the environment temperature is 0°C or 50°C, the maximum non-linearity error is 0.04% of full input range.

Specifications of Interface Connector CN1, CN 2

Type of Connector	10250-52A2JL[mfd.by 3M]
Type of mating connector (option)	10150-6000EL[mfd. by 3M]
Connecting Cable (option)	PCB50PS-0.5P, PCB50PS-1.5P PCA50PS-0.5P, PCA50PS-1.5P ADC-68M/50M

Physical Dimensions

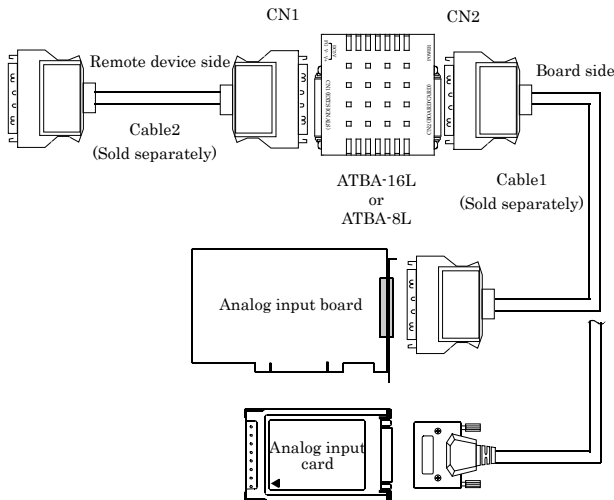


Packing List

Termination Panel (One of the following)...1
[ATBA-16L or ATBA-8L]
Power supply connector (MC1.5/3-ST-3.5)...1
This User's Manual...1
Warranty Certificate...1
Serial Number Label ...1

Connect a Board/Card

Board/Card Connection



Correspondence Products (Optional)

Board for LowProfile PCI

: ADA16-8/2(LPCI)L, AD16-16(LPCI)L, ADAI16-8/2(LPCI)L,
ADI16-16(LPCI)L

Board for LowProfile PCI Express

: AIO-160802L-LPE, AI-1616L-LPE, AIO-160802LI-PE,

AI-1616LI-PE

Card for CardBus

: ADA16-8/2(CB)L

Cables (Optional)

Shielded cable with a 50-pin mini-ribbon connectors on 2 Ends

: PCB50PS-0.5P (0.5m), PCB50PS-1.5P (1.5m)

Shielded cable with a 50-pin mini-ribbon connectors to open-ended

: PCA50PS-0.5P (0.5m), PCA50PS-1.5P (1.5m)

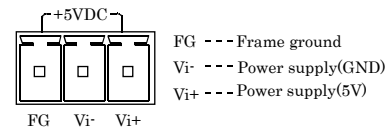
68/50-pin conversion shielded cable for analog input/output

: ADC-68M/50M (0.5m) *1

*1 ATBA-16L, ATBA-8L uses this cable when connecting the PC card.

Connecting an External Power Supply

Because the corresponding analog board/card have not voltage output, an external power supply is required to make the terminal work.



Items	Specification
Power Voltage	5VDC
Voltage Tolerance	±5%
Current Capacity	0.4A or larger

A bundled connector plug (MC1,5/3-ST-3,5, Phoenix Contact. Suitable wire: AWG28 - 16) can help you to connect the external power supply.

When you using this MC1,5/3-ST-3,5 plug to connect the external power supply, please strip the end of the corresponding wire, insert it into the connector plug, then fix the screw to secure.

There is an optional AC adapter available from CONTEC.

Accessories (Optional):

AC adapter (Input: 90 - 264VAC, Output: 5VDC 2.0A): POA200-20

AC adapter (Input: 90 - 264VAC, Output: 5VDC 2.0A): POA200-20-2

- When using the external power supply:
The terminal can provide the maximum power supply of 5VDC, 2A.

⚠ CAUTION

- To use the AC adapter, please connect it to the terminal first, then plug the AC adapter into a outlet.
- When the terminal is not used, please leave the AC adapter unplugged.
- Continuously using the AC adapter under high temperature environment will affect its life.
- Use the AC adapter not in a closed place but in a well-ventilated place. The AC adapter heats up itself when loaded heavily. If the AC adapter is exposed to high temperature or used continuously, you should keep the load at about 80% of the maximum load.