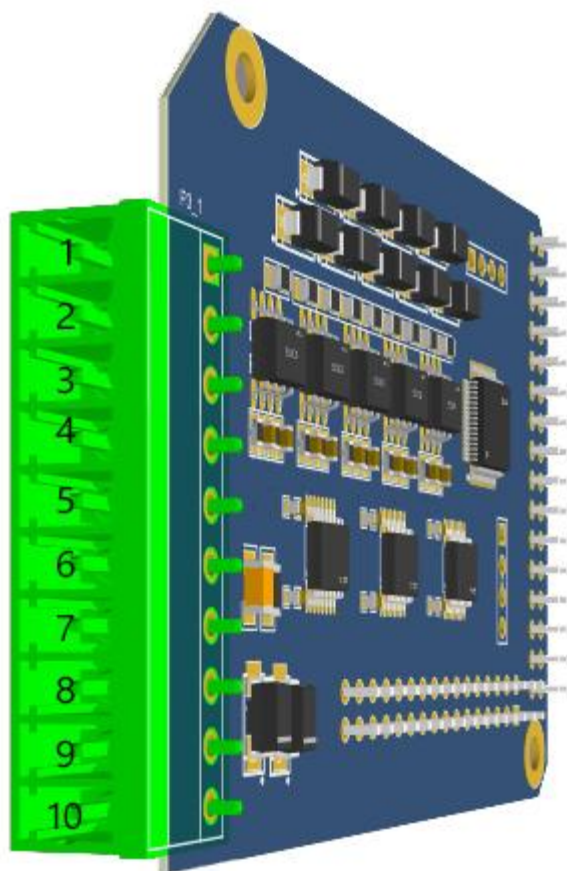


Y Series I/O Modules

4CH Analog Input Module Y31/Y33



Y31/Y33 User Manual

Version: V1.0

Date: 2024-12-19

Shenzhen Beilai Technology Co.,Ltd

Website: <https://www.bliiot.com>

Preface

Thanks for choosing BLIIoT Y series I/O modules. These operating instructions contain all the information you need for operation of Y series I/O modules.

Copyright

This user manual is owned by Shenzhen Beilai Technology Co., Ltd. No one is authorized to copy, distribute or forward any part of this document without written approval of Shenzhen Beilai Technology. Any violation will be subject to legal liability.

Disclaimer

This document is designed for assisting user to better understand the device. As the described device is under continuous improvement, this manual may be updated or revised from time to time without prior notice. Please follow the instructions in the manual. Any damages caused by wrong operation will be beyond warranty.

Revision History

Revision Date	Version	Description	Owner
2024/12/19	V1.0	Initial Release	HYQ

Table of Contents

1 Introduction	4
1.1 Overview	4
1.2 Technical Specifications	4
1.3 Model Selection	4
2 Wiring	5
2.1 Terminal Definitions	5
2.2 Connection Example	6
3 Warranty Terms	6
4 Technical Support	6

1 Introduction

1.1 Overview

The Y31/Y33 analog input modules are among the Y series I/O modules for IOy series and ARMxy series products.

This module has 4 input channels, namely AI1, AI2, AI3, and AI4, which can receive 0...20mA / 4...20mA current control signals and 0-5V / 0-10V voltage control signals from field devices (such as 4-wire current/voltage-type sensors).

The input signals of each channel are electrically isolated and then converted into digital signals, which are transmitted with a 16-bit resolution.

1.2 Technical Specifications

Name	Parameter	Description
Power Supply	Operating Voltage	Internal Voltage
	Power Consumption	0.25W
Analog Input	Channels	4 channels
	Input Mode	Single-ended input
	Input Type	0...20mA / 4...20mA (4-wire) 0-5V / 0-10V (4-wire)
	Resolution	16Bit
	Accuracy	±0.1 % FSR @ 25 °C
	Sampling Rate	300 ms
Certifications	EMC	IEC 61000-4-2 (ESD) Level 3
		IEC 61000-4-4 (EFT) Level 3
		IEC 61000-4-5 (Surge)Level 3

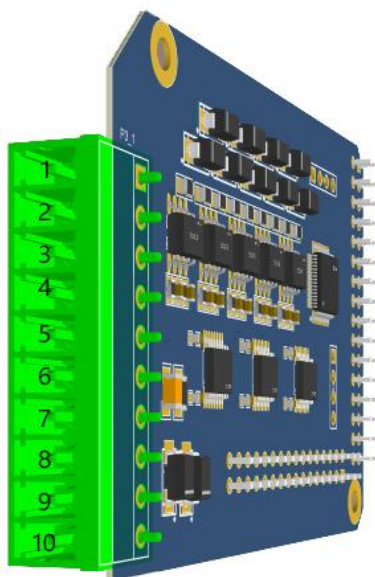
1.3 Model Selection

No.	Name	Model	Channel	Signal Type
1	4-Channel Analog Input Module	Y31	4	0...20mA / 4...20mA
2	4-Channel Analog Input Module	Y33	4	0-5V/0-10V

2 Wiring

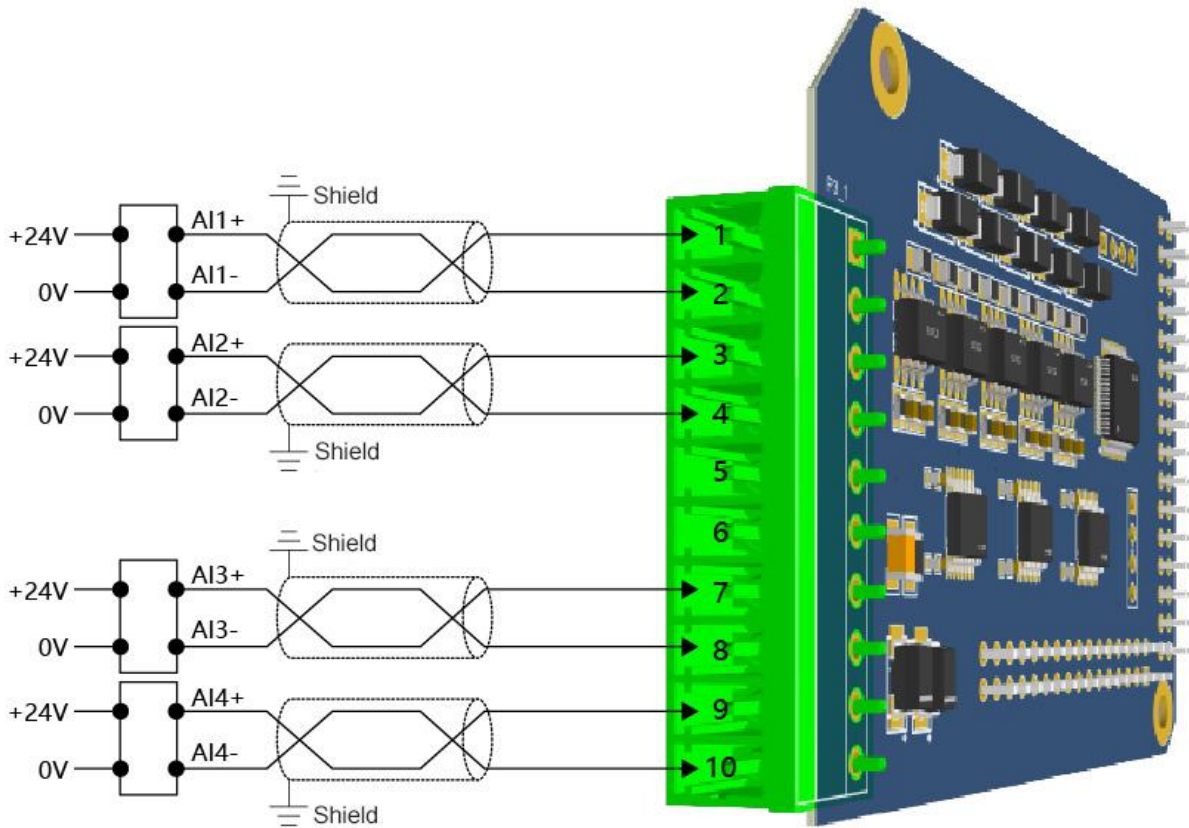
2.1 Terminal Definitions

Notice: Please refer to the product's label for the specific terminal numbering sequence.



Terminal NO.	Definition	Description	Terminal NO.	Definition	Description
1	AI1+	Analog input channel 1	3	AI2+	Analog input channel 2
2	AI1-		4	AI2-	
5	GND	AI ground pin	6	GND	AI ground pin
7	AI3+	Analog input channel 3	9	AI4+	Analog input channel 4
8	AI3-		10	AI4-	

2.2 Connection Example



3 Warranty Terms

- 1) This equipment will be repaired free of charge for any material or quality problems within one year from the date of purchase.
- 2) This one-year warranty does not cover any product failure caused by man-made damage, improper operation, etc

4 Technical Support

Shenzhen Beilai Technology Co., Ltd
 Website: <https://www.bliiot.com>