

Y Series I/O Modules

4 Channel RS485/RS232 Module Y63



Y63

User Manual

Version: V1.0

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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.

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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
2025/3/1	V1.0	Initial Release	HYQ

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1 Introduction

1.1 Overview

The Y63 is an industrial-grade serial port module specifically designed to expand the capabilities of the ARMxy series ARM embedded industrial computers. It features electrical isolation and provides 4 RS485 or RS232 interfaces, greatly enhancing the performance of ARMxy series embedded systems.

The Y63 serial module supports baud rates up to 10 Mbps and can operate in Full-duplex / Half-duplex communication modes. It is capable of stable operation in harsh environments and is widely used in industrial automation and control systems.

1.2 Technical Specifications

Name	Parameter	Description
Power Supply	Operating Voltage	Internal Voltage
	Operating Voltage	5V
	Power Consumption	1.25W
4CH RS485/RS232	Channel	4 Channels
	Transmission Mode	4 RS232 channels or 4 RS485 channels
	Maximum Baud Rate	RS232: 115kbps RS485: 10Mbps
	Data Bits	RS232: 5, 6, 7, or 8 bits (configurable) RS485: 5, 6, 7, or 8 bits (configurable)
	Stop Bits	RS232: 1, 1.5, or 2 bits (configurable) RS485: 1, 1.5, or 2 bits (configurable)
	Parity	RS232: Odd, Even, None (configurable) RS485: Odd, Even, None (configurable)
	Flow Control	RS232: Not supported RS485: Not supported
	Input Impedance (Receiver)	RS232: 323 Ω RS485: 323 Ω
	Maximum Transmission Distance	RS232: 15m (baud rate ≤ 1200 bps) RS485: 1200m (baud rate ≤ 1200 bps)
	Multi-Device Communication Support	RS232: Not supported RS485: Not supported

	Communication Mode	RS232: Full-duplex / Half-duplex / Simplex RS485: Half-duplex simplex / Simplex
	Data Transmit/Receive Mode	RS232: Transmit/Receive mode, Receive-only mode, Transmit-only mode RS485: Transmit/Receive mode, Receive-only mode, Transmit-only mode
	Receiver Sensitivity	RS232: 3V RS485: 200mV
	Logic Level (RS232)	Logic "1": 0.7 V Logic "0": 3.7 V
	Maximum Output Current per Channel	250mA
	Communication Cable Requirements	Shielded twisted pair
	Isolation protection	2KVrms
Certifications	EMC	IEC 61000-4-2 (ESD) Level 3
		IEC 61000-4-4 (EFT) Level 3
		IEC 61000-4-5 (Surge)Level 3

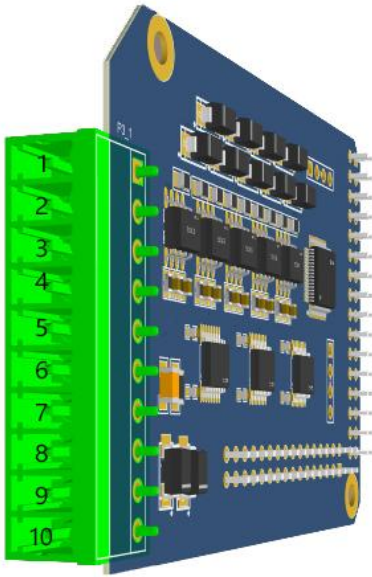
1.3 Model Selection

No.	Name	Model	Channel	Signal Type
1	4-channel RS485/RS232	Y63	4	RS485 or RS232

2 Wiring

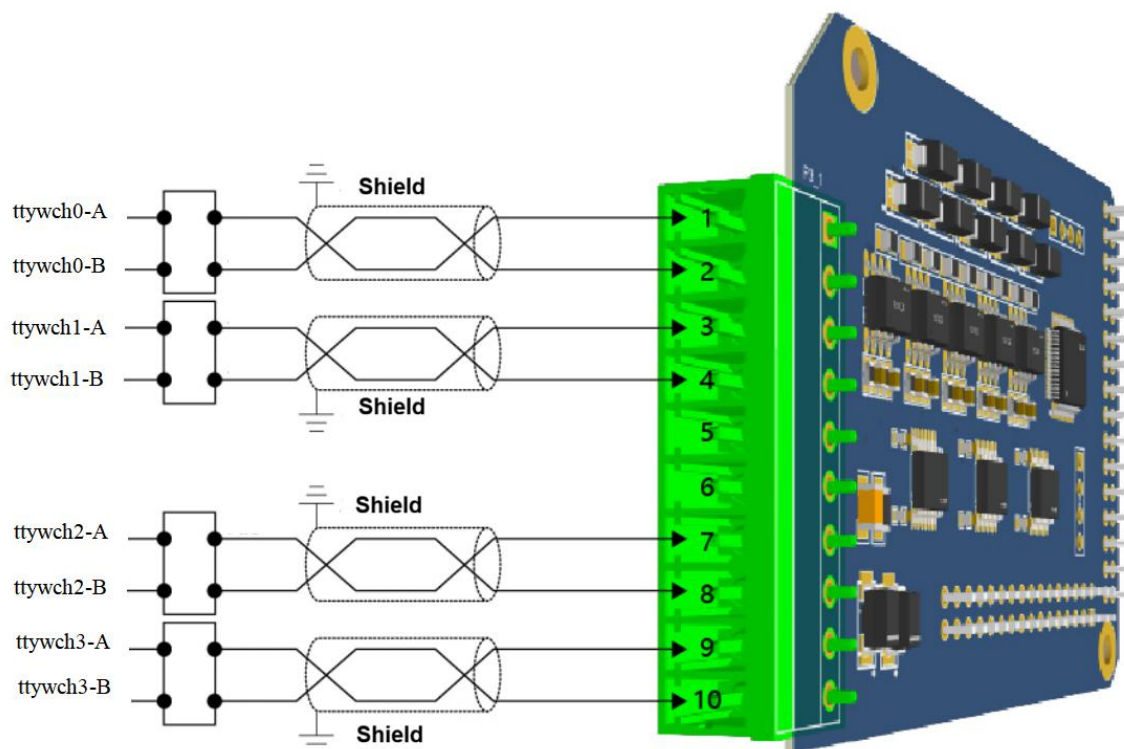
2.1 Terminal Definitions

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



Terminal NO.	Definition	Description	Terminal NO.	Definition	Description
1	ttywch0-A	Channel 1 Transmit	6	GND	Ground Terminal
2	ttywch0-B	Channel 1 Receive	7	ttywch3-A	Channel 3 Transmit
3	ttywch1-A	Channel 2 Transmit	8	ttywch3-B	Channel 3 Receive
4	ttywch1-B	Channel 2 Receive	9	ttywch4-A	Channel 4 Transmit
5	GND	Ground Terminal	10	ttywch4-B	Channel 4 Receive

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

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