

# UAV AIS Receiver AISR206

**Product Introduction** 



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### 1. Introduction

The AISR206 is a compact and lightweight AIS receiver specifically designed for integration with small and medium-sized UAVs. It is a dual-channel AIS receiver with a built-in low-noise amplifier (LNA), offering features such as small size, light weight, and low power consumption—making it ideal for UAV applications.

The AISR206 is equipped with a 6-pin JST-GH output interface, with pin assignments compatible with the Pixhawk telemetry port, enabling easy connection to UAV flight controllers.



#### Packing List:

No.	Item	Quantity		
1	AISR206	1 unit		
2	6-pin JST-GH Connection Cable	1piece		
3	AIS Antenna	1 set		



### 2. Features

- Compact size and lightweight, suitable for UAV integration
- Outputs standard AIVDM message format
- Supports AIS message types 1-27
- Supports dual AIS channels
- Highly configurable for various application scenarios
- Optional output of AIS signal strength
- Optional reception of "Long-Range AIS" signals
- Integrated 6-pin JST-GH interface for flight controller connection

No.	Specification			
1	Input Voltage	3.7V~5.5V (5V recommended)		
2	Power Consumption	70mA		
3	<b>Reception Frequencies</b>	161.975 MHz, 162.025 MHz		
4	Data Format	AIVDM		
5	AIS Channels	2		
6	Sensitivity	-115dBm		
7	Bandpass Filter Range	156.3~162.025MHz		
8	Input Impedance	50Ω		
9	Dimensions	56x48.6x24.7 mm (not including antenna connector)		
10	Weight	75g		
11	Antenna Connector	SMA		

## 3. Specifications



# 4. Interface



#### Pin Description:

No.	Pin Name	Function		
1	5V	5V Power Input		
2	RXD	Serial RX Input		
3	TXD	Serial TX Output		
4	SCL	I2C Clock		
5	SDA	I2C Data		
6	GND	Ground		

SERIAL Configuration:

No.	Name	Configuration		
1	Baud Rate	38400		
2	Data Bits	8		
3	Parity	none		
4	Stop Bits	1		



## 5. Connecting to the Flight Controller

The AISR206 can be connected to a flight controller to transmit received AIS data to the flight control hardware. The ground control station software can then display the information sent from the AISR206.

#### **Connection Method:**

Use the 6-pin JST-GH cable to connect the AISR206 to the flight controller. After the flight controller is connected to the ground control station, launch the ground station software (e.g., MissionPlanner). Configure the relevant parameters, and the AIS data from the AISR206 will be displayed.

To begin, run MissionPlanner, select the newly added COM port in the upper right corner of the main interface, and click the Connect button to establish a connection with the computer.



Once the connection is successfully established, the AIS data transmitted by the AISR206 will be displayed.





## 6. PC Debugging

The AISR206 can be connected to a computer for local debugging via a 6-pin JST-GH to USB module.

· · · · · · · · · · · · · · · · · · ·	Uart Ass	istant		×
Serial Options	Data Receive			UartAssist V5.0.13 🗇 🗘
Channel COM27 #L 👻	AIVDM. 1. 1 A. B39f0#03wr : P>@50K1303wuP21Mk	0*48		0
Baudrate 38400 👻	AIVIM, 1, 1, , A, B3HOI: 03wr: NCP50Kl3Q3wP021Mk	0*03		
Databita 8	AIVDM, 1, 1, , A, B33sVfP3wr:Ug@50Kl3Q3wPP21Mk,	0*28		
	AIVDM, 1, 1, , A, B3eaJF03wr: du050Kl3Q3wQ021Mk,	0*02		
Stopbits	AIVDM, 1, 1, , A, B4eGrSP3wr: lAh50Kl3Q3wQP21Mk	0*6A		
Paritybits NONE 🔄 📩	AIVDM, 1, 1, , A, B5MrVH03wr:sVP50Kl3Q3wR021Mk,	0*7A		
Flowetri NONE	AIVDM, 1, 1, , A, B5Mtp?03wr;2s@50KL3Q3wRP21Mk	0*38		
	AIVDM, 1, 1, , A, B3aE0K03wr; : @050KL3Q3wS021Mk,	0*42		
Close	ALVUM, 1, 1, , A, B6g1: VU3wr; ATh5UK13Q3wSF21Mk,	U*//		
	LATIME 1 1 A DOD OF AUSWER REPEACED	0*60		
	LATVING 1, 1, 4, B3910203WF, 17850KL3Q3W1121NR,	0*06		
Recy Uptions	ATVIM. 1. 1. A. B33sVfP3wr: Uz@50K1393wUP21Mk	0*20		
🕫 ASCII C HEX	AIVDM. 1. 1. A. B3eaTF03wr : du050K1393wV021Mk	0*05		
🔲 🔲 Log Display Mode 🛛	AIVDM, 1, 1, , A, B4eGrSP3wr: 1Ah50K13Q3wVP21Mk	0*6D		
C Auto Linefeed	! AIVDM, 1, 1, , A, B5MrVH03wr:sVP50Kl3Q3wW021Mk,	0*7F		
- Hide Received Data	! AIVDM, 1, 1, , A, B5Mtp?O3wr;2s@50Kl3Q3wWP21Mk,	0*3D		
	! AIVDM, 1, 1, , A, B3aE0K03wr; : @050Kl3Q3wg021Mk,	0*76		
J Save Recv to File	AIVDM, 1, 1, , A, B6gl: v03wr; ATh50Kl3Q3wgP21Mk,	0*43		
<u>AutoScroll</u> <u>Clear</u>	AIVDM, 1, 1, , A, B69F <h03wr; hqp50k13q3wa021mk,<="" td=""><td>0*5D</td><td></td><td></td></h03wr;>	0*5D		
	AIVDM, 1, 1, , A, B39f0g03wr; P>@50K13Q3waP21Mk,	0*50		
Send Options	AIVDM, 1, 1, , A, B3H0I:03wr:NCP50K13Q3wb021Mk	0*31		
	*ALVUM, 1, 1, , A, B33sV1F3wr: Ug@5UKL3Q3w5F21Mk, *ATVIM, 1, 1, , A, B3esTF03wr: du050K13Q3wc021Mk	U*1A 0*30		
C File Data Transfer				*
🔽 Use Escape Chars 🕡	Data Saud ( pape o pup o mup ( pape	5 000 0 DOD <b>4</b>	-	
Auto Append Bytes		5. GND 6. DSK •	<u>7. KIS</u> • 8. UIS •	9. KL Viear Clear
Cycle Time 1000 ms				^
Shortout <u>History</u>				v Send
🞯 Ready!		251/0	RX:11395	TX:0 Reset

## 7. Customization

All our products can be supplied tailored to your specific needs and customized with your brand and logo. We tailor designs, enclosures, features, and data formats to meet your specifications. Our OEM services empower you to launch unique products swiftly and risk-free.

## 8. Contact Us

We welcome users, integrators, dealers and distributors to contact us.

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