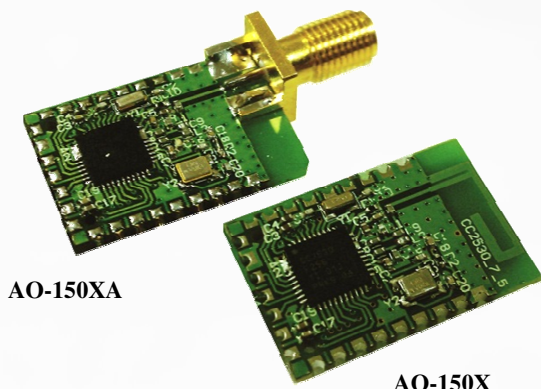


# 2.4G ZigBee Module

## Features

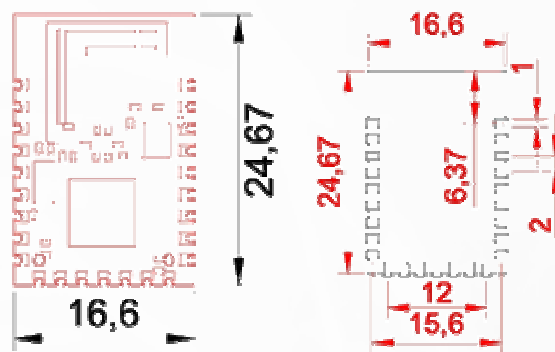
- Wireless transceiver module with high reliability.
- Meet 2.4 GHz IEEE 802.15.4 standard.
- Compatible with peer to peer, star, tree, or mesh network configurations.
- Role of coordinator or router is determined by using the JUMP hardware.
- Parameters are set by using AT commands via the UART interface.
- -97dBm sensitivity at the receiver.
- Adjustable signal transmission strength within 4.5dBm to -22dBm.
- AO-150X series has optimized built-in on board antenna with 150 M (LOS) transmitting distance.
- AO-150XA series has SMA external antenna with 150 M (LOS) transmitting distance.



## Applications

- Wireless sensor network (WSN).
- Smart meter.
- RF remote controller.
- Home and building automation.
- Industrial control and surveillance.
- Set top box (STB).
- Smart energy.
- Wireless transmission for RS232 / RS485 / RS422.

## Dimensions (Unit: mm)



## Pin Definition

1	GND	6	P1.7	11	GND	16	P0.2	21	P0.4
2	GND	7	P1.6	12	P1.3	17	P1.0	22	P0.1
3	RESET	8	P1.5	13	P1.2	18	P0.7	23	P0.0
4	P2.2	9	P1.4	14	P1.1	19	P0.6	24	VDD
5	P2.1	10	VDD	15	P0.3	20	P0.5	25	GND

## Model List

Model	Input Power	Operating Temperature	Function
AO-1501 AO-1501A	DC 3.3V±10%	-10 ~ 70°C	Only module board without firmware
AO-1503 AO-1503A	DC 3.3V±10%	-10 ~ 70°C	Wireless UART module board
AO-1505 AO-1505A	DC 3.3V±10%	-10 ~ 70°C	Module with 4 analog input channels (input range: 0 ~ 3.3V) and 4 controlled digital output channels
AO-1506 AO-1506A	DC 3.3V±10%	-10 ~ 70°C	Module with 4 digital input channels and 4 controlled digital output channels
AO-1509	DC 3.3V±10%	-10 ~ 70°C	UART transparent communication for Arduino application