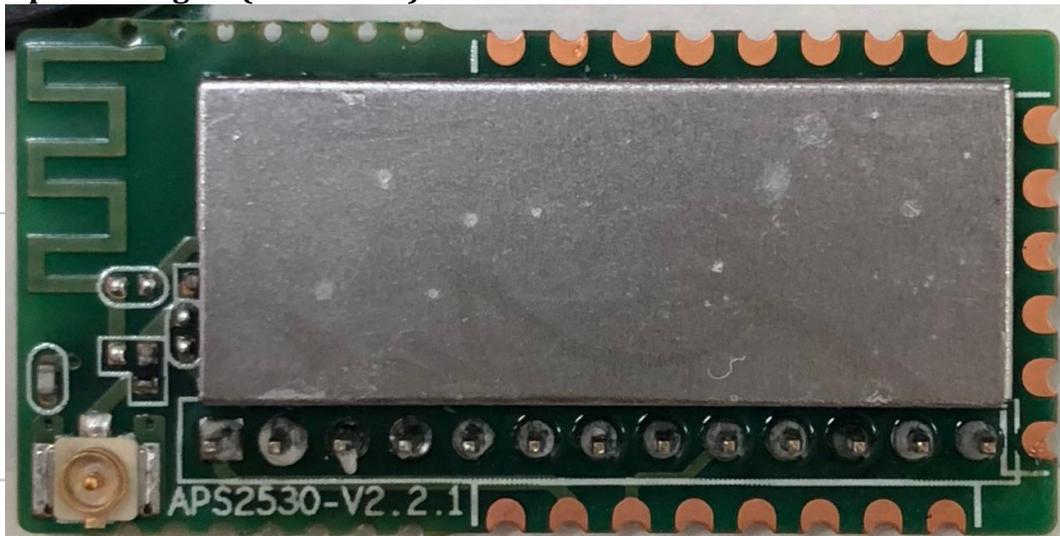


User Manual for APS2530H

The model used ZigBee PRO protocol to send RF signals for device communication. The model can be used after pairing with a dedicated device which was installed with a receiver dongle.

APS2530H was used as a dongle which need to be installed in customer's device. It offers UART to communicate with customer's device according predefined protocol.

1:product figure(APS2530H)



2: Technical specifications

RF operating frequency: 2402MHz ~ 2483MHz

Reference frequency: 2.400GHz

Channel spacing: 5MHz

Channel wide : 2MHz

Modulation method: OQPSK

Communication rate: 250Kbps

昱能科技

Output power: 15DBm

Communication mechanism: applied ZigBee frequency hopping mechanism, passively frequency hopping.

Average operating current : <20mA

Operating voltage : 2V-3.6V

Max remitting current: 20mA

Max rate : 250Kbit/s

Receiving sensitivity : -95dbm

Receiving current : <24mA

Max receiving distance : >100M

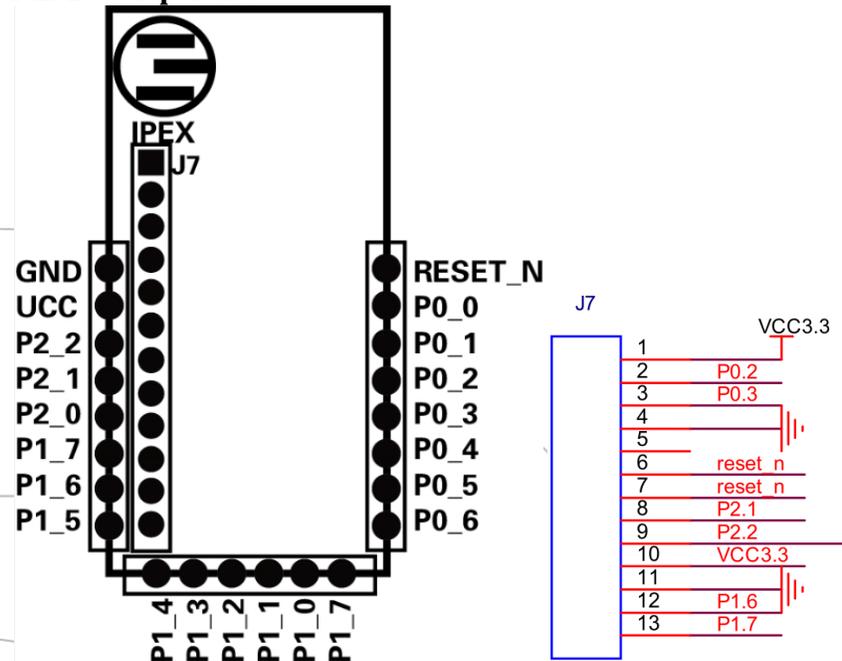
Normal operating receiving distance : 100M

3. Installation and usage instructions

Installation Notes: users can use SMT or DIP to connect to ZIGBEE module. It must be ensured that the interface of the module(VCC,GND,RESET,UART) is accurately connected with the customer's equipment. Make sure the IPEX interface is properly connected to the antenna.

Instructions for use: Users can interact with the zigbee module through the serial port. The user uses the serial port to send data to the zigbee module in the specified format, and the zigbee module will send the data to the specified slave module through the radio frequency signal.

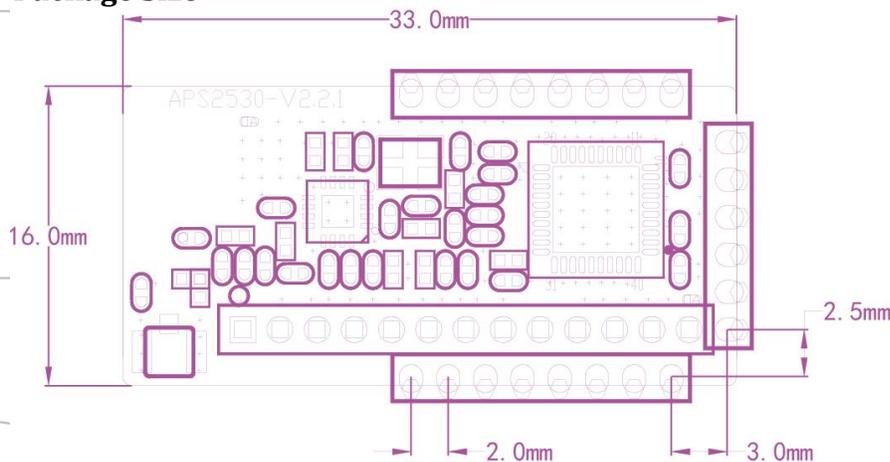
Pin Descriptions



Pin name	Pin type	Description
P0_0	Digital I/O	Port0.0
P0_1	Digital I/O	Port0.1
P0_2	Digital I/O	Port0.2 - UART RX
P0_3	Digital I/O	Port0.3 - UART TX
P0_4	Digital I/O	Port0.4
P0_5	Digital I/O	Port0.5
P0_6	Digital I/O	Port0.6

P0_7	Digital I/O	Port0.7
P1_0	Digital I/O	Port1.0 - 20-mA drive capability
P1_1	Digital I/O	Port1.1 - 20-mA drive capability
P1_2	Digital I/O	Port1.2
P1_3	Digital I/O	Port1.3
P1_4	Digital I/O	Port1.4
P1_5	Digital I/O	Port1.5
P1_6	Digital I/O	Port1.6
P1_7	Digital I/O	Port1.7
P2_0	Digital I/O	Port2.0
P2_1	Digital I/O	Port2.1
P2_2	Digital I/O	Port2.2
VCC	Power	2-V-3.6-V digital power-supply connection
GND	Ground	Connect to GND
RESET_N	Digital input	Reset, active-low

Package Size



4. Warning

This device complies with Part 15, Subpart C, Section 15.247 of the FCC Rules.

- product should not collocate with other radio
- host label should content modular FCC ID:2AFGR-APS2530H/IC :20481-APS2530H
- ANT type/gain tolerance of antenna OEM should use.

Use only the antenna supplied by the manufacturer when operating this device(antenna gain:2dBi). Unauthorized antennas, modifications, or attachments, could damage the device and violate FCC regulations. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

- Do not disassemble, repair, modify or replace the remote

昱能科技

control Unit or any of its components.

EF Radiation Exposure and Hazard Statement:

- To ensure compliance with FCC RF exposure requirement, this device must be installed in a location such that antenna of the device will be greater than 20cm away from all persons. Using higher gain antennas and types of antennas not covered under the FCC certification of this product is not allowed. Installers of the radio and end users of the product must adhere to installation instructions provided in this manual. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Please comply with the national and international flight safety regulations when using device during your flight trip.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Caution:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage

昱能科技

radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF exposure warning

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux radiations de la IC définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.