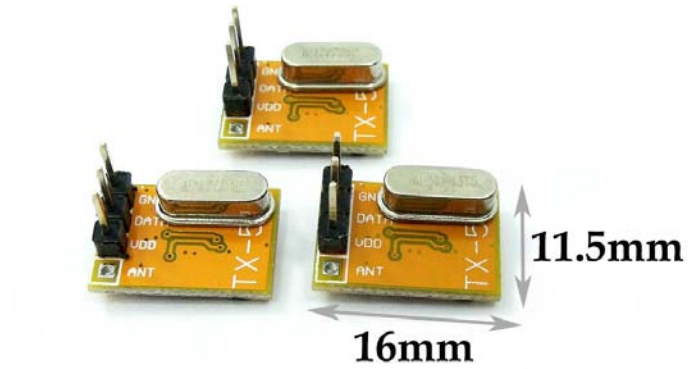
TX-5

433M/315M ASK Transmitter

INHAOS™ Everything done inhouse

Features

1, Complete UHF transmitter
2, Frequency 315MHz or 433.92MHz
3, Data rates up to 10kbps ASK
4, Output Power up to 10dBm
5, Low voltage operation (Down to 1.8V)
6,Power down modes and wake-up functions to reduce power consumption



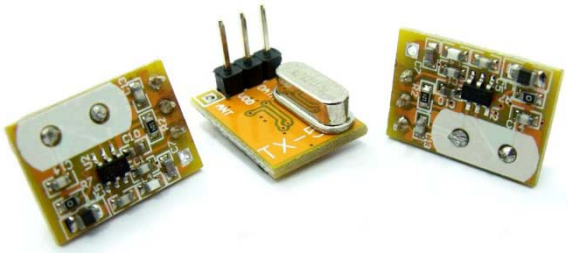
Specifications

Electrical Characteristics

Power supply :	1.8 to 3.6V
RF Frequency:	315MHz or 433.92MHz
Mark supply current:	12.5mA
SPACE supply current:	3mA
Standby current:	1uA
RF Output power:	10dBm
Data Rate:	Max 10kbps
Under Voltage Lock Out:	1.6V

Environmental

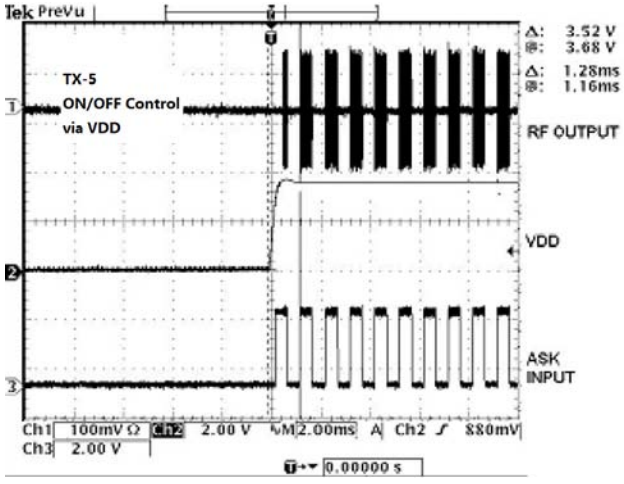
Operation Temperature :	0°C to 55°C
Operating Humidity :	0 to 90% non-condensing
Storage Temperature :	-20°C to 65°C



The TX-5 is a high performance , easy to use , signal chip ASK Transmiter module for remote wireless applications in 315MHz or 433.92MHz , this transmitter module has three strong attributes:

- Power delivery : Max delivering +10dBm into a 50Ohm load.
- Operation voltage : Operates from 1.8V to 3.6V.
- Operation temperature : -20°C to 65°C

The TX-5 transmitter module is ideal for industrial and consumer applications where simplicity and form factor are important. For enhanced power saving , TX-5 includes power managing function , the power managing function enables transmitter activated as high transient data input trigger signals are received , The transmitter will also be automatically switched off if there are no data input transients for a time exceeding approximately 75mS.



Output Power ON-OFF Control

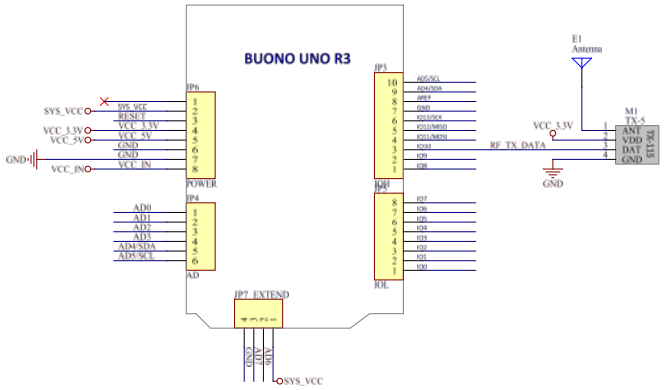
There are three ways to enable the PA output power:

- By supplying the ASK signal with VDD applied continuously, resulting in a Mark and Space RF output condition.
- Involves applying both VDD and ASK synchronously.
- Using Power Manager funcion.

The second method allows for longer battery usage since the battery is disconnetcted during non-activation, left picture shows the RF output time response since VDD and ASK are applied to the TX-5 module, the RF output response , as a function of VDD , is typically less than 1.25mSec , this measurement was done using the TX module with BUONO UNO R3.

Note: The ASK signal should never be applied before VDD.

Application with BUONO UNO R3:



rc-switch

The rc-switch lib allow you Use your Arduino or Raspberry Pi to operate this module , download:
https://github.com/sui77/rc-switch

Arduino Demo Code:

```
#include <RCSwitch.h>

RCSwitch mySwitch = RCSwitch();

void setup() {

  Serial.begin(9600);
  // Transmitter is connected to Arduino Pin #10
  mySwitch.enableTransmit(10);

}

void loop() {

  /* See Example: TypeA_WithDIPSwitches */
  mySwitch.switchOn("11111", "00010");
  delay(1000);
  mySwitch.switchOn("11111", "00010");
  delay(1000);

  /* Same switch as above, but using decimal code */
  mySwitch.send(5393, 24);
  delay(1000);
  mySwitch.send(5396, 24);
  delay(1000);

  /* Same switch as above, but using binary code */
  mySwitch.send("000000000001010100010001");
  delay(1000);
  mySwitch.send("000000000001010100010100");
  delay(1000);

  /* Same switch as above, but tri-state code */
  mySwitch.sendTriState("00000FFF0F0F");
  delay(1000);
  mySwitch.sendTriState("00000FFF0FF0");
  delay(1000);

  delay(20000);
}
```

INHAOS Headquarter：
1111 Oakmont Drive #C, San Jose, CA 95117
E-mail ： support@inhaos.com

INHAOS China office：
No.6 Building,Songke Estate,Songshan Lake National Hi-tech Industrial Development Zone,Dongguan,Guangdong Province，523808,China

E-mail：Support@inhaos.com

This module have 315M and 433.92MHz two frequency for user choice , the Receiver can be using RXB61.