

**Model No.: DL-R02EF**

**Description: Fixed code RF Receiving module**

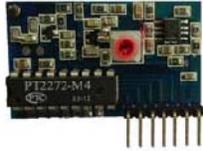


Photo:

Product Detail:

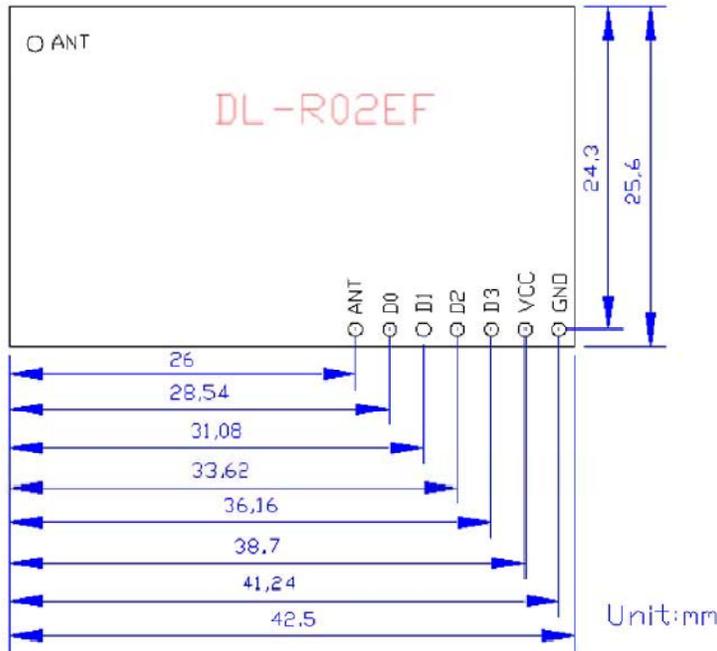
DL-R02EF is a widely used super regeneration receiving module, its design principle and pin output is the same as DL-R02BF, but the PCB itself has color circle inductance and hollow inductance, with less components. It has the features of more stable performance, higher sensitivity, low power consumption, high quality and competitive price. It has decode IC 2272, can be used directly. This module is widely applied in various remote control system.

1. Application:

- a. 4 bits digital wireless receiving, anti-theft alarm signal receiving;
- b. Industrial remote control, remote measurement and remote sensing;
- c. Various remote controls for home-appliances.

2. Technical Specifications:

Operating voltage:	5.0V±0.5V
Operating current:	≤2mA (5.0VDC)
Operating principle:	super regeneration
Modulate mode:	OOK/ASK
Frequency range:	250MHz-450MHz
Bandwidth:	2MHz (315MHz, test when the sensitivity decline to 3dBm)
Sensitivity:	better than -105dBm (50Ω)
Rate:	<5Kbps (at 315MHz at -95dBm)
Decoding format:	PT2272, HS2272, AX5327
Output signal:	TTL electric level, 4 route control output; output form with Latch and unlatch;
Learning quantity:	20 remotes
Antenna length:	24cm (315MHz), 18cm (433.92MHz)



#### 4. Notes for usage

- a. Pls use soft lead wire or other hard metal (like telescopic antenna), It can not be either too long or too short, or it will affect the receiving distance. The antenna should be stretched as straight as possible if it is using soft lead wire, and as far as possible from the metal objects.
- b. The power voltage needs to be stable with low ripple factor and multilevel wave filtering (such as adding magnetic ball, inductance, capacitance etc.)
- c. We suggest the clock frequency of the MCU should be lower than 4MHZ if used together with MCU, the crystal should be as far as possible to the RF receiving module, or the higher harmonic of the crystal will affect the communication distance.
- d. Please pay attention to the conformity of rate and code format between encoding IC and decoding IC, otherwise the inconformity will affect communication distance or even break off the communication.

**Model No.: DL-T05AF**

**Description: Fixed code RF transmitting module**



**Photo:**

Product Detail:

DL-T05AF is a kind of high frequency transmitting module designed by our company, working with some high frequency receiving module made by our company, its communication distance can reach more than 1000m. This module can be widely applied in security fields, various long-distance wireless remote control system and wireless indication system of shots in the army.

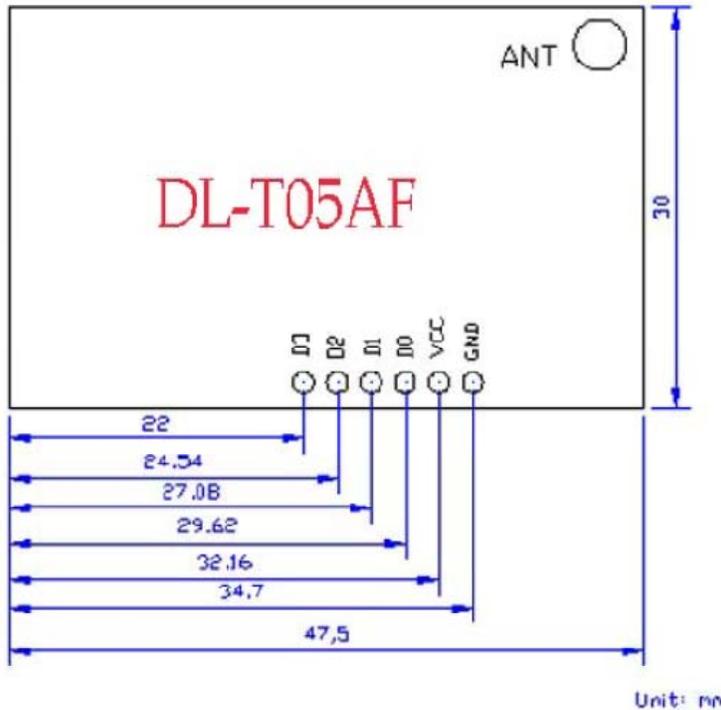
1. Application:

- a. Various wireless long distance remote control;
- b. Various anti-theft alarm system;

2. Technical Specifications:

Operating voltage:	3V~9V
Operating current:	max≤320mA (9V), min≤13mA (3V)
Resonance mode:	surface acoustic wave (SAW)
Modulate mode:	OOK/ASK
Operating frequency:	315MHz-433.92MHz, customized frequency is available.
Frequency error:	±150kHz(max)
Transmission power:	150mW (315MHz at 9V)
Rate:	≤10Kbps
Encoding format:	PT2262, VD5026, AX5326
Antenna length:	24cm (315MHz), 18cm (433.92MHz)

3. Size and Pin definition



#### 1. Notes for usage

- a. Pls use soft lead wire or other hard metal (like telescopic antenna), the length should be chosen according to the respective frequency (24cm for 315MHz, 18cm for 433.92MHz). The antenna should be stretched as straight as possible if it is using soft lead wire.
- b. If put the module inside the metal case, the antenna should be fetched out of case. To connect the metal telescope antenna with 50ohm coaxial line will get better effect in transmission.
- c. If the products are equipped with spiral antenna, please straightly stretch it before using, otherwise high frequency audion might be damaged or the circuit could not work properly.
- d. Over voltage or over time work is not allowed, otherwise the circuit will be burned out
- e. As the wireless frequency is precious natural resources, please do not keep the module always at transmission condition.