

# Operational Description

MU21023 Wireless 2.4G MOUSE, household or office use

## A. Working Principle

### 1. Operation of Description

The device works with RF2.405GHz—2.475GHz ISM band, Mouse through the PC's USB port Dongle Send Operation Data. Mouse and USB Dongle Receiver GFSK the sole criterion for transparent data transmission (2.405 to 2.75GHz ISM band). Features include sending and receiving data signals, the normal working mouse through the space, the operation of the signal sent to the receiver, the receiver signal is received by the decoder, signal through the USB interface to transfer the corresponding functional operation of the computer processing.

Mouse is a digital wireless RF2.4G HID Device. The RF IC TLSR8510EP16 is a low-power, high-integrated single chip RF transceiver using 0.18μm mixed-mode CMOS process optimized for ISM 2.4GHz wireless systems.

Mouse contains receiver, The device is expressly designed for low power consumption. Specific expertise has been applied to save current consumption and thus to extend the battery life, which is of most importance to the portable wireless consumer applications. Power saving mode has also been implemented to further reduce the power consumption.

B. Antenna Spec.: PCB antenna and matched capacitor comprised the resonance circuit that the resonance is in 16.00MHz. Antenna Gain 2dBi Maximum

## C. Technical Spec.:

### a. MOUSE

Working frequency	2.405GHz—2.475GHz
Modulation method	GFSK
Input Voltage	3V (2pcs AAA Battery)
Current Dissipation	< 15mA (work)
Current Dissipation	< 1.5mA (sleep)
Sleeping Mode Current	< 50uA (power down)
Transmitting Angle	360°
Wake / Moving UP Mode	Button Wake UP
Working Distance	10Meters @Free Space
Tracking Resolution	1200
Optical Type Button Number	3Key
Channel Number	8

Frequency Channel List:

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2405	5	2457
2	2411	6	2463
3	2417	7	2469
4	2451	8	2475