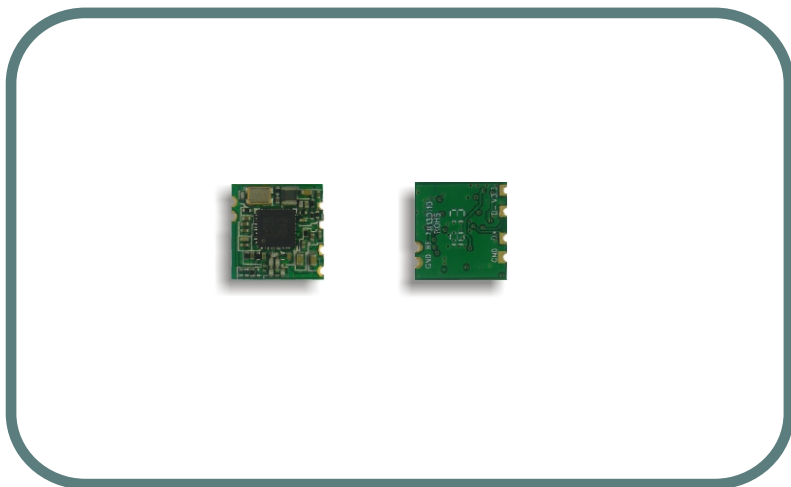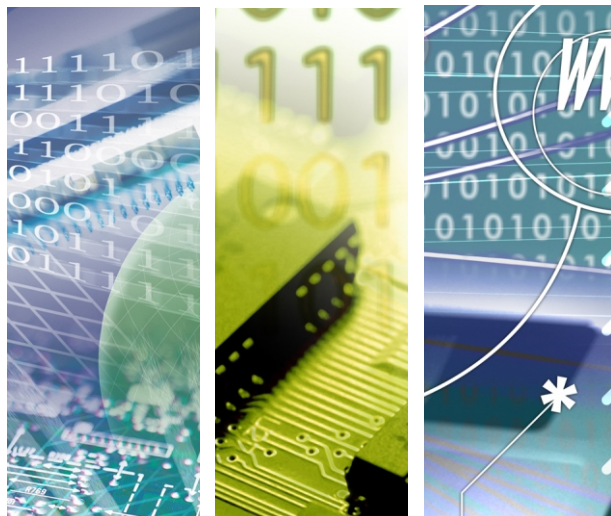# CSW801K
802.11 b/gn, 1T1R, SMT Module

802.11 b/g/n, 1T1R, USB SMT Module

Introduction of Products

The CSW801K is a very tiny WLAN PCB module with USB2.0 interface and RF output. It supports IEEE 802.11b/g/n standards, and this module operates in 2.4GHz ISM frequency band with low power consumption. It applies a highly integrated MAC/BBP and RF single chip MT7601UN supported up to 150Mbps physical rate.

With low cost and small package, it can be applied especially in small devices like mobile phone, tablet, mini PC, etc. Also users can use in TV, IP camera, MP3/MP4 player, and other devices. It is ideal solution for confined space application for consumer products.
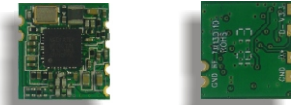
Product Highlight

- Small Dimension: 13.0mm long and 12.2mm wide
- 802.11b: up to 11Mbps
- 802.11g: up to 54Mbps
- 802.11n: up to 150Mbps (physical data rate)
- Support Wi-Fi High throughput: HT40 in 1T1R mode
- Security: Support Encryption listed as following:
- WEP 64/128
- WPA & WPA2
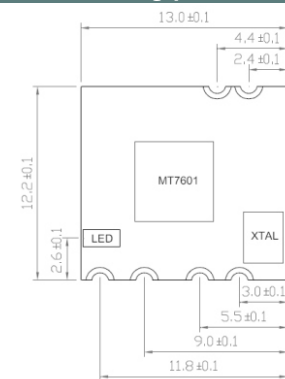- TKIP
- AES
- Support Wi-Fi Direct

Specification

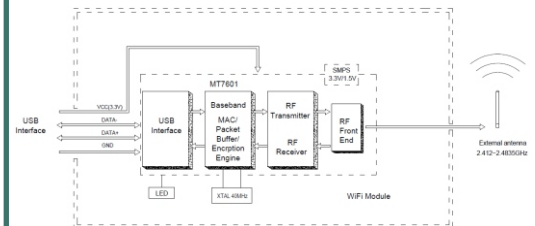| Hardware	
Main Chipset	MediaTek MT7601UN
Supported Interface	USB 2.0
RF Output	2 PCB Semi-hole
Dimension	13.0 mm x 12.2mm
Wieght	0.5g
Antenna	Need external antenna
Operating Voltage	DC 3.3V (±5%)
Wi-Fi	
Standard	IEEE 802.11b/g/n
Frequency Range	2.402~2.480 GHz
Operating Channel	Ch. 1~14 (Depends on country)
Data Rate	11Mbps (.11b), 54Mbps (.11g), 150Mbps (.11n)
Transmit Power	802.11b: 18 ±1 dBm (CCK, at 11Mbps)
	802.11g: 16 ±1 dBm (OFDM, at 54Mbps)
	802.11n: 14 ±1 dBm (OFDM, at HT20@MCS7)
	802.11n: 14 ±1 dBm (OFDM, at HT40@MCS7)
Receiver Sensitivity	802.11b: -88 ±1 dBm
	802.11g: -72 ±1 dBm
	802.11n: -70 ±1 dBm (HT20)
	802.11n: -68 ±1 dBm (HT40)
Modulation Scheme	802.11b: CCK, QPSK, BPSK
	802.11g/n: OFDM
Security	WEP 64/128, WPA, WPA2, WFA, WPS2.0, WAPI
Other Feature	Support Wi-Fi Direct
Current Consumption	
Sleep Mode	1.5 mA
Normal operation	< 80 mA (in average)
RX Listen	6 mA
TX (OFDM, HT40, MCS7 at 16dBm)	210 mA
TX (CCK)	250 mA
Environment Information	
Operating Temperature	-10℃ ~ 60℃ (for continuous operating)
Store Temperature	-20℃ ~ 85℃
Operating Humidity	Relative humidity 20% ~ 80%
Store Humidity	Relative humidity 20% ~ 80% (for 36 hours)

Product quick glance

ME Drawing/placement

Block diagram

Ordering Information

PART NUMBER	DESCRIOPTION
TFGA-CSW801K0-11	non packaing, 802.11 b/g/n, 1T1R, USB SMT Module