

# ZLT X02

5G uFi

3GPP Release 15

5G NR

Multi LTE Bands

802.11b/g/n/ac/ax



ZLT X02 is a portable broadband wireless 5G uFi product developed by Guangzhou Tozed Kangwei Intelligent Technology Co., Ltd based on 5G/4G network requirements. The size is similar to a credit card, it has the functions of a modem, router and access point, the device supports type-C to connect to the computer to access the Internet, supports WiFi6, and supports NFC one-touch connection Internet, password-free access to Wi-Fi function.

## Hardware Specifications

Spec	Description
<b>Chipset</b>	5G/LTE: UNISOC IVY510, dual-core ARM Cortex-A55 processor, up to 1.35GHz
	Wi-Fi: 88W9098-A2-NYGC/MP
<b>Memory</b>	ROM: 2Gb
	RAM: 4Gb DDR3
<b>Indicators</b>	1. Power 2. 5G/4G indicator
<b>Buttons</b>	RESET
<b>SIM</b>	Nano SIM(4FF), Support 1.8v & 3.3v ESIM
<b>Power Supply</b>	AC100V~240V,50Hz~60Hz DC 5-18V (TypeC, Support fast charge protocol)
<b>interfaces</b>	1. TYPE-C USB 2. NFC Password-free connection WiFi
<b>Dimensions</b>	107 x 80 x 17(mm)
<b>Weight</b>	TBD

## Environment Specifications

Feature	Capability
<b>Operating Temperature</b>	-10 °C~45 °C
<b>Storage Temperature</b>	-40 °C~85 °C
<b>Operating humidity</b>	95% Maxton-condensing
<b>Storage humidity</b>	95% Maxton-condensing

## Network/RF Specifications

Feature	Capability
<b>3GPP Release</b>	NR: 3GPP Release 15
	LTE: 3GPP Release 14
<b>NR Modulation</b>	DL 256QAM, UL 256QAM
<b>NS SCS</b>	30khz, 15khz
<b>Support Bands</b>	5G NR: N1/N3/N8/N28/N41/N77/N78/N79
	4G FDD: B1/B2/B3/B5/B7/B8/B20/B28A/B28B, B32 can be customized;
	4G TDD: B34/B38/B39/B40/B41
	3G: B1/B2/B4/B5/B8
<b>DSS Bands</b>	FDD NR N1/N3/N8/N28
<b>NR CA</b>	Not Support (In Roadmap, will be supported by new hardware)
<b>NSA ENDC</b>	B3/B7/B8/B20-N1 B1/B20-N3 B1/B20-N8 B1/B3/B20-N28 B1/B3/B8/B20/B39/B40-N41 B1/B3/B20-N77 B1/B3/B5/B7/B8/B20/B28/B38/B40/B41-N78 B1/B3/B8/B39/B40-N79
<b>5G MIMO</b>	DL MIMO 4*4 UL MIMO 2*2
<b>5G RX/TX</b>	NSA: 1T4R SA: 2T4R
<b>5G Output power@25°C</b>	23+-2dBm
<b>5G HPUE</b>	Support TDD NR HPUE
<b>LTE Category</b>	DL CAT12, UL CAT13
<b>LTE Modulation</b>	DL 256QAM, UL 64QAM

<b>LTE DL 3CC</b>	CA Combination tested (Maximum Aggregated Bandwidth, MHz) B40+B40+B40(50) B41+B41+B41(50) B39+B39+B41(50) B39+B41+B41(60) B8+B41+B41(50) B3+B41+B41(50) B3+B7+B8/B20/B28(50) B3+B3+B8(50) B1+B7+B20(50) B1+B3+B5/B7/B8/B20/B28(50) CA Combination under testing (Maximum Aggregated Bandwidth, MHz) B1+B3+B3(50) B1+B5+B7(50) B1+B7+B8(50) B1+B8+B20(50) B1+B41+B41(50) B3+B3+B7/B20/B28(50) B3+B5+B7(50) B3+B7+B7/B38(50) B3+B8+B20/B38(50) B7+B7+B20/B28(50)
<b>LTE DL 2CA (Inter/Intra)</b>	Intra-band: 28C, 38C, 39C, 40C, 41C, 1A-1A, 1C, 3A-3A,3C, 5B, 7A-7A,7B, 7C, 8B Inter-band: 1A-3A, 1A-5A,1A-7A,1A-8A, 1A-20A,1A-28A, 3A-5A, 3A-7A,3A-20A, 3A-28A, 3A-40A, 3A-41A,5A-7A,5A-40A,7A-8A,8A-39A,8A-40A,8A-41A,7A-20A, 7A-28A Under testing: 3A-8A,5A-5A,
<b>LTE UL 2CA (Intra)</b>	38C, 39C, 40C, 41C, 1C, 3C 7C, 5B, 8B, 1A-1A
<b>LTE MIMO</b>	DL MIMO 2*2, UL MIMO 1*1
<b>LTE TX/RX</b>	1T2R
<b>LTE Output Power@25°C</b>	23+-2dBm
<b>Wi-Fi Frequency</b>	2.4GHz/5GHz
<b>Wi-Fi MIMO</b>	MIMO 2*2(5G) MIMO 2*2(2.4G)
<b>Wi-Fi Output Power</b>	12 +- 2 dBm
<b>Wi-Fi Channel BW</b>	20MHz,40MHz,80MHz(ac)
<b>Wi-Fi Channel</b>	2.4G Wi-Fi Channels: 1-13 5G Wi-Fi Channels:

	36 40 44 48 52 56 60 64 100 104 108 112 116 120 124 128 132 136 140 149 153 157 161 165
<b>Peak Throughput</b>	5G NR: 1Gbps (UL), 2Gbps (DL)

If the NR/LTE antenna supports all frequency, the antenna gain will be lower than the value in table

## Software Specifications

Spec	Description
<b>Language</b>	English
	Could be customized
<b>Https/Http</b>	Both
<b>User Login</b>	Support two users (admin user and normal user) and different limitation and display
<b>Network Status</b>	Signal strength
	Network type(5G/4G)
	SIM card status
<b>System Status</b>	Mobile parameters, APN/DHCP/Wi-Fi information, Memory details, Version/Device information
<b>Internet Settings</b>	Network mode setup, Data switch, Roaming setup
<b>APN Setup</b>	APN name, Nat Switch on APN bear, PDP(IPV4/IPV6/IPV4V6), MTU size
<b>SIM Card</b>	PIN Management
	SIM card Authentication
<b>DHCP Setup</b>	Enable/disable DHCP server Configure DHCP IP Pool Configure DHCP Lease Time
<b>Static Route</b>	Route Setup on WAN/LAN interface
<b>DDNS</b>	Support
<b>PCI Lock</b>	Support
<b>Carrier SIM Lock</b>	Support
<b>VPN</b>	PPTP/L2TP

<b>Backup/ restore</b>	Encryption backup current settings and restore the backup settings
<b>Work Mode</b>	NAT/ Router mode

## Device Management

Spec	Description
<b>Software Update</b>	Web GUI update TR069 update
<b>TR069</b>	HTTP/HTTPS, Supports upload/download the ACS specified file, Support configure & queries parameters Support remote upgrade Support cycle monitor
<b>Diagnostics</b>	Ping/Trace/Tcpdump
	Export diagnosis results and operation logs

## WIFI Features

Functions
Support Wi-Fi Switch on/off via Web GUI
Support Wi-Fi SSID/KEY setup
Support Encryption: OPEN, WPA2-PSK, WPA/WPA2-PSK,

WPA3-PSK, WPA2/WPA3-PSK
Support SSID broadcasting
Support Wi-Fi protocol IEEE 802.11 b/g/n, IEEE 802.11 ac/ax
Support Wi-Fi bandwidth setup
Support Wi-Fi channel self-adapt and select
Supported 2.4G Wi-Fi Channels: 1-13 Supported 5G Wi-Fi Channels: 36 40 44 48 52 56 60 64 100 104 108 112 116 120 124 128 132 136 140 149 153 157 161 165
Support Wi-Fi maximum users 2.4G Wi-Fi: 16 5G Wi-Fi: 16
Support WPS: Support WPS PIN/WPS PBC

## Firewall Features

Functions
DMZ
Port Mapping
Port Filter
IP-Port Filter
MAC Filter
URL Filter
IP MAC Binding
ACL Firewall
Speed Limit
UPnP