

# Atom ID04-6.5 Indoor UE



## INTRODUCTION

The Baicells Atom ID04-6.5 Indoor User Equipment (UE) provides superior wireless access performance and comprehensive routing capabilities to bring wireless broadband data and voice services to end-users. It converts high-speed TDD or FDD LTE signals to Wi-Fi signals on the local area network (LAN). Wireless and wired devices, including mobile phones, laptops, tablets, and other smart devices, can access the UE simultaneously.

## FEATURES

- Supports TDD and FDD LTE network modes
  - TDD bands 38, 40, 41, 42, 43, and 48
  - FDD band 7
- Complies with 3GPP Release 9 CAT4 standards
- 100 Mbps Ethernet interface
- IEEE 802.11b/g/n Wi-Fi, 2.4 GHz
- Simple local and remote Web GUI management
- TR069 network management protocol

- Cell lock, SIM lock, and Pin lock
- User-friendly LED indicators

## BASIC SPECIFICATIONS

LTE Standard	3GPP Release 9, CAT4
ETH LAN Port	1 RJ-45 port 10/100 auto-sensing, auto-MDX
LED Indicators	Power, LTE, LTE Signal, WLAN
USIM	1.8V/3V 2FF
Restore Button	Tactile button. Press for at least 10 seconds to restore the UE to its factory settings.
Power Switch	On/Off
Power Supply	Input: Universal range 100V to 240V AC Output: 12VDC
Battery	Customization
Dimensions (HxWxD)	7.6 x 6.6 x 2.9 inches 193 x 168 x 74 millimeters
Weight	14 oz (400 g)

## RF SPECIFICATIONS

LTE Mode	FDD/TDD
Channel Bandwidth	5/10/15/20 MHz
Max Output Power	23 ± 2 dBm
Frequency Bands	Bands 3/7/38, 7/38, 40/41, 42/43/48

TXRX	1T2R
Peak Rate	FDD: DL 100 Mbps, UL 50 Mbps TDD: DL 100 Mbps, UL 10 Mbps (2:7)
Modulation	UL: QPSK, 16QAM DL: QPSK, 16QAM, 64QAM
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 25°C
Antenna Type	Internal Omni
Polarization	Linear, vertical
Antenna Efficiency	> 70%
Isolation	N/A
VSWR	≤ 2
Horizontal Beamwidth (3 dB)	N/A
Vertical Beamwidth (3 dB)	N/A
Antenna Gain	6.5 dBi @ 3.x GHz 5 dBi @ 2.x GHz 4 dBi @ 1.x GHz 3 dBi @ sub-1 GHz

## SOFTWARE SPECIFICATIONS

Network Mode	NAT / Bridge / Tunnel
IP Protocol	IPv4 / IPv6
SIM	PIN management, SIM lock
Network Connection Management	Auto / Manual
LTE Scan Mode	Full band scan, frequency lock
WLAN	WPS, MSSID isolation, VLAN
VPN	L2TP, GRE, PPTP, L2 VxLAN
NAT	Port forwarding, port trigger, DMZ, ALG
Firewall	IP / MAC / URL filter; access control; block port scanner/SYN flood; SPI filter
Network Mgmt	TR069, SNMP
Diagnostics	TCP dump, ping, traceroute
Statistics	LTE status/connection time/system up time; device status; DHCP client list; Wi-Fi station list; LTE & firewall status
Maintenance	Data and time setting; reboot; restore factory settings; restore/back up

	configuration file; firmware upgrade locally or OTA
System Logs	Operating; run-time; filter/select/display/export
Antenna Select	Customization

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	14°F to 113°F / -10°C to 45°C
Storage Temperature	-4°F to 158°F / -20°C to 70°C
Humidity	5%~95%

## Wi-Fi SPECIFICATIONS

Standard	IEEE 802.11b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
TXRX	2T2R
MIMO	2x2
Peak Rate	802.11b: 11 Mbps; 802.11g: 54 Mbps 802.11n: 300 Mbps
Modulation	DSSS/CCK, OFDM
Receive Sensitivity	<ul style="list-style-type: none"> <li>-64 dBm @ 65 Mbps, typical for 802.11n</li> <li>-65 dBm @ 54 Mbps, typical for 802.11g</li> <li>-76 dBm @ 11 Mbps, typical for 802.11b</li> </ul>
Max Output Power	17 ± 3 dBm
Antenna Type	Internal omni
Antenna Gain	2 dBi
Active Users	32

## GLOBAL PART NUMBERS

EG2030C-M1	Atom Indoor Cat4 UE, 2.5 GHz, 6 dBi, B40/41, Gen 2
EG2030C-M2	Atom Indoor Cat4 UE, 3.5 GHz, 6 dBi, B42.43, Gen 2