

# Atom OD04 Outdoor Low-Gain UE



## INTRODUCTION

The Baicells Atom OD04 Outdoor Low-Gain User Equipment (UE) provides superior wireless access performance and routing capabilities to bring broadband data and voice services to end-users. The UE operates with standardized Long-Term Evolution (LTE) Time Division Duplexing (TDD) to enable high-speed, wireless communications.

Wireless and wired devices, including mobile phones, laptops, tablets, and other smart devices, can access the UE simultaneously.

The product comes with a standard one-year warranty.

## FEATURES

Note: Features may vary based on model or region.

- Supports LTE TDD Bands 40/41/42/43/48
  - Customization may be requested; contact [sales\\_na@baicells.com](mailto:sales_na@baicells.com)
- 2.5 GHz or 3.5 GHz models
- Complies with 3GPP Release 9 Cat4 standards
- 1000 Mbps Ethernet interface
- GUI-based local and remote management
- TR069 network management protocol support
- Cell lock, SIM lock, and pin lock
- User-friendly LED status indicators
- Built-in bipolar, directional, high-gain LTE antenna
- Power supply with PoE
- Pole or wall mount
- Wi-Fi assisted alignment

## BASIC SPECIFICATIONS

LTE Standard	3GPP Release 9, Cat4
ETH LAN Port	1 RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE
LED Indicators	LTE, SIM, LAN, PWR, LTE Signal
USIM	1.8V/3V 2FF
Restore Button	Press for 10 seconds to restore the UE to its factory settings
Power Supply	Input: Universal range 100-240V AC Output: PoE (24VDC, 0.5A)
Dimensions (HxWxD)	9.5 x 6 x 2 inches 241 x 154 x 50 millimeters
Weight	2 lbs / 900 g

## RF SPECIFICATIONS

LTE Mode	TDD
Channel Bandwidth	5/10/15/20 MHz
MAX Output Power	23 dBm (±2)
Frequency Bands	40/41/42/43/48 and customized
Peak Rate (20 MHz)	DL 100 Mbps, UL 10 Mbps (2:7)
Modulation	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 25°C
Antenna Type	Internal directional, 1T2R

Antenna Gain	14 dBi @ 3.x GHz, 2 ports 11 dBi @ 2.x GHz, 2 ports
Antenna Polarization	±45
Antenna Efficiency	>70%
Isolation	≤-25dB
VSWR	≤2
Horizontal Beamwidth (3 dB)	• 63 ±3° @ 2.x GHz, 2 ports • 60 ±3° @ 3.x GHz, 2 ports
Vertical Beamwidth (3 dB)	• 35 ±3° @ 2.x GHz, 2 ports • 25 ±5° @ 3.x GHz, 2 ports

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	10 ± 3dBm
Antenna Type	Internal omni, 1T1R
Antenna Gain	0 dBi

## SOFTWARE SPECIFICATIONS

Network Mode	NAT or Bridge
IP Protocol	IPv4/IPv6
SIM	PIN management. SIM lock
Network Connection	Auto or Manual
LTE Scan Mode	Full band scan, frequency lock
WLAN	WPS; MSSID isolation
VPN	L2TP, GRE, PPTP
NAT	Port forwarding, DMZ, ALG
Firewall	IP/MAC/URL filter; access control; block port scanner/SYN flood
Network Mgmt	TR069, SNMP
Diagnostics	TCP dump, ping, traceroute
Statistics	LTE status; connection/system up time; device status; DHCP client list; Wi-Fi station list; LTE status; firewall status
Maintenance	Data and time setting; reboot; restore factory settings; restore or back up configuration file; firmware upgrade locally or OTA
System Logs	Operating; run-time; filter / select / display / export

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°F to 131°F / -40°C to 55°C
Storage Temperature	-40°F to 158°F / -40°C to 70°C
Operating Humidity	5% to 95%
Ingress Protection Rating	IP65

## GLOBAL PART NUMBERS

EG7035L-M1	Atom Outdoor Cat4, 1T2R, 2.5 GHz, 11 dBi, B40/41 Gen 2 UE <ul style="list-style-type: none"> <li>• FCC certification: 2AG32EG7035LM1 (2412-2687.5 MHz)</li> <li>• IC certification: 20982-EG7035LM1 (2400-2690 MHz)</li> </ul>
EG7035L-M11	Atom Outdoor Cat4, 1T2R, 3.5 GHz, 14 dBi, B42/43/48 Gen 2 UE <ul style="list-style-type: none"> <li>• FCC certification: 2AG32EG7035LM2 (3650-3700 MHz)</li> <li>• IC certification: 20982-EG7035LM11 (3650-3700 MHz)</li> </ul>

### Notes:

- 1 - Other models available for other regions. Contact [sales\\_na@Baicells.com](mailto:sales_na@Baicells.com).
- 2 - Customized versions may be requested.

## WI-FI ALIGNMENT SPECIFICATIONS

Standard	IEEE 802.11b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
Peak Rate	<ul style="list-style-type: none"> <li>• 802.11b: 11 Mbps</li> <li>• 802.11g: 54 Mbps</li> <li>• 802.11n: 300 Mbps</li> </ul>