Atom OD06 Outdoor High-Gain UE

B∧icells

INTRODUCTION

The Baicells Atom OD06 Outdoor High-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.

The Atom OD06 high-gain UE is designed exclusively for the fixed wireless market, featuring a spring-locked gasketed door for protecting the SIM slot and eliminating the need to weatherproof the power and Ethernet connections. 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.
- 2.5 GHz or 3.6 GHz models
- Complies with 3GPP Release 10 Cat6/7 standards
- 1000 Mbps Ethernet interface
- GUI-based local and remote Web management
- TR069 network management protocol support

- Cell lock, SIM lock, and pin lock
- User-friendly LED status indicators
- Built-in LTE bipolar, directional, high-gain antenna
- Power supply with PoE
- Pole or wall mount
- Wi-Fi assisted alignment

BASIC SPECIFICATIONS

LTE Standard	3GPP Release 10, Cat6/7
ETH LAN Port	One 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 100V-240V AC Output: PoE (24VDC, 0.5A)
Dimensions (HxWxD)	9.8 x 9.8 x 3.2 inches 248 x 248 x 80 millimeters
Weight	4 lbs / 1800 g

RF SPECIFICATIONS

LTE Mode	TDD
Channel Bandwidth	5/10/15/20 MHz

Carrier Aggregation	2CC CA
MAX Output Power	23 ± 2dBm / TX Ant
Frequency Bands	40/41/42/43/48 and customized
Peak Rate (20 MHz)	DL 220 Mbps, UL 15 Mbps (2:7)
Modulation	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM, 64QAM
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 25°C
Antenna Type	Internal directional, 2T4R (uplink enhanced)
Antenna Gain	14 dBi @ 3.x GHz, 4 ports 11 dBi @ 2.x GHz, 4 ports
Antenna Polarization	±45°
Antenna Efficiency	> 70%
Isolation	≤- 20dB
VSWR	≤ 2.5
Horizontal Beamwidth (3 dB)	60 ±5° @ 2.x GHz, 4 ports 25 ±5° @ 3.x GHz, 4 ports
Vertical Beamwidth (3 dB)	35 ±5° @ 2.x GHz, 4 ports 25 ±5° @ 3.x GHz, 4 ports

SOFTWARE SPECIFICATIONS

Network Mode	NAT, Bridge, Router, Tunnel
IP Protocol	IPv4/IPv6
SIM	PIN management, SIM lock
Network Connection	Auto or Manual
LTE Scan Mode	Full band scan, frequency lock
WLAN	Wi-Fi for UE alignment
VPN	L2TP L2/L3, GRE L2/L3
NAT	Port forward/trigger, DMZ, ALG
Firewall	IP/MAC/URL filter; access control; block port scanner/SYN flood; SPI filter
Network Mgmt	TR069, TR104, SNMP*
Diagnostics	TCP dump, ping, traceroute
Statistics	LTE status; connection/system up time; device status; DHCP client list; Wi-Fi station list; firewall status
Maintenance	Date 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

*Future software release

WI-FI ALIGNMENT SPECIFICATIONS

Standard	IEEE 802.11b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
Peak Rate	802.11b: 11 Mbps 802.11g: 54 Mbps 802.11n: 300 Mbps
Modulation	DSSS/CCK, OFDM
Receive Sensitivity	• -64 dBm @ 65 Mbps, typical for 802.11n • -65 dBm @ 54 Mbps, typical for 802.11g • -76 dBm @ 11 Mbps, typical for 802.11b
Max Output Power	10 ± 3dBm
Antenna Type	Internal omni, 1T1R
Antenna Gain	0 dBi

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	IP67

GLOBAL PART NUMBERS

EG7010A-M11	Atom Outdoor Cat6, 2T4R, 3.5 GHz, 14 dBi, B42/43/48 UE • FCC certification: 2AG32EG7010AM11N (3650-3700 MHz) • IC certification: 20982-EG7010A (3650-3700 MHz)

Notes:
1 - Other models available for other regions. Contact sales_na@baicells.com.
2 - Customized versions may be requested.