Atom OD06 Outdoor Low-Gain UE

INTRODUCTION

The Baicells Atom OD06 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 communcations.

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 42/43/48
  - Customization may be requested; contact sales_na@baicells.com.
- 2.5 GHz or 3.5 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 bipolar, directional, high-gain LTE antenna
- Power supply with PoE
- Pole or wall mount
- Supports Wi-Fi 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 to 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
Carrier Aggregation	2CC CA
MAX Output Power	23 dBm (±2) / TX antenna
Frequency Bands	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	11 dBi @ 3.x GHz, 4 ports 8 dBi @ 2.x GHz, 4 ports
Antenna Polarization	±45
Antenna Efficiency	> 70%
Isolation	≤ -25dB
VSWR	≤ 2
Horizontal Beamwidth (3 dB)	70 ±5° @ 3.x GHz, 4 ports
Vertical Beamwidth (3 dB)	30 ±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 forwarding, port trigger, DMZ, ALG
Firewall	IP/MAC/URL filter; access control; block port scanner/SYN flood; SPI filter
Network Mtmt	TR069, 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 ± 3 dBm
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	IP65

GLOBAL PART NUMBERS

EG7010C-M11	Atom Outdoor Cat6, 2T4R, 3.5 GHz, 11 dBi, B42/43/48 UE • FCC certification: 2AG32EG7010CM11 (3652.5-3697.5 MHz) • IC certification: 20982-EG7010C (3650-3700 MHz)

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