Atom OD04 Outdoor High-Gain UE

INTRODUCTION

The Baicells Atom OD04 Outdoor High-Gain User Equipment (UE) provides superior wireless access performance and comprehensive routing capabilities to bring wireless 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 40/41/42/43/48
  - Customization may be requested; contact sales_na@baicells.com
- 2.5 GHz or 3.5 GHz models
- Complies with 3GPP Release 9 Cat4 standards
- 100 Mbps Ethernet interface
- GUI-based local and remote Web management
- TR069 network management protocol support
- Cell lock, SIM lock, and pin lock
- Built-in bipolar, directional, high-gain LTE antenna
- User-friendly LED status indicators
- Power supply with PoE
- Pole or wall mount
- Wi-Fi assisted alignment*

*Future software release

BASIC SPECIFICATIONS

LTE Standard	3GPP Release 9 Cat4
ETH LAN Port	1 RJ-45 port 10/100 auto-sensing, auto-MDX, PoE
LED Indicators	MIU, 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)	9.8 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

MAX Output Power	23± 2dBm
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	19.5 dBi @ 3.x GHz, 2 ports 14 dBi @ 2.x GHz, 2 ports
Antenna Polarization	± 45°
Antenna Efficiency	> 70%
Isolation	≤ -20dB
VSWR	≤ 2.5
Horizontal Beamwidth (3 dB)	• 35 ±5° @ 2.x GHz, 2 ports • 25 ±5° @ 3.x GHz, 2 ports
Vertical Beamwidth (3 dB)	• 35 ±5° @ 2.x GHz, 2 ports • 25 ±5° @ 3.x GHz, 2 ports

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, VLAN
VPN	L2TP, GRE, PPTP, L2 VxLAN
NAT	Port forwarding/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 / system up time; device status; DHCP client list; Wi-Fi station list; firewall status
Maintenance	Date and time setting; reboot; restore factory settings; restore/back up config files; firmware upgrade locally or OTA
System Logs	Operating; run-time; filter / select / display / export

WI-FI 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	IP67

GLOBAL PART NUMBERS

EG7035E-M1	Atom Outdoor Cat4, 1T2R, 2.5 GHz, 14 dBi, B40/41 Gen 2 UE • FCC certification: 2AG32EG7035EM1 (2498.5-2687.5 MHz) • IC certification: 20982-EG7035EM1 (2500-2690 MHz)
EG7035E-M11	Atom Outdoor Cat4, 1T2R, 3.65 GHz, 19.5 dBi, B42/43/48 Gen 2 UE • FCC certification: 2AG32EG7035EM11 (2412-3697.5 MHz) • IC certification: 20982-EG7035EM11 (3650-3700 MHz)

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