



## INTRODUCTION

The Baicells AtomOD06H Outdoor high-gain Customer Premise Equipment (CPE) provides superior performance and excellent routing capabilities, which will bring broadband data and voice services to end-users.

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

The product comes with a standard one-year warranty; an extended warranty is available.

## HIGHLIGHTS

*NOTE: Features can vary based on model or region.*

- Supports LTE TDD Bands 42/43/48
- Complies with 3GPP Release 10 CAT6/7 standards
- 1000 Mbps Ethernet interface
- Peak data rate of up to DL 220 Mbps, UL 30 Mbps
- 64QAM for DL and 64QAM for UL as the highest order modulation formats.
- Built-in bipolar directional LTE antenna
- GUI-based local and remote Web management
- Excellent Non-Line-of-Sight (NLOS) coverage
- Supports TR069 network management protocol
- Cell lock, SIM lock, and pin lock
- User-friendly LED status indicators
- Pole or wall mounted
- Wi-Fi assisted alignment
- Transparent bridge mode\* (L2 Support).

## TECHNOLOGY

LTE Standard	3GPP Release10, CAT6/7
LTE Mode	TDD
Channel Bandwidth	SC: 5/10/15/20 MHz CA: 40 MHz as maximum aggravated bandwidth
Frequency Bands	B42 (3400 MHz - 3600 MHz) B43 (3600 MHz - 3800 MHz) B48 (3550 MHz - 3700 MHz)
Multiplexing	DL 4x4 MIMO, UL 2x2MIMO*
Security	Firewall: IP/MAC/URL filter; ACL rule

## INTERFACE

Ethernet Interfaced	1 RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE
Protocols Used	IPv4/IPV6, UDP, TCP, IP, ICMP, SNMPv2c, SNMPv3c, HTTPS, SSH, TELNET, TR069, TR104, CBSD
Network Management	Web GUI, ACS, OMC, SNMP
VLAN	802.1Q

## PERFORMANCE

Peak Rate	2x20MHz (CA)	DL (2x2 MIMO, 64QAM)	UL (64QAM)
	TDD UL/DL Config. 1	160 Mbps	60 Mbps
	TDD UL/DL Config. 2	220 Mbps	30 Mbps
	20MHz (SC)	DL (4x4 MIMO, 64QAM)	UL (64QAM)
	TDD UL/DL Config. 1	160 Mbps	30 Mbps
	TDD UL/DL Config. 2	220 Mbps	15 Mbps
Modulation	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM		
Carrier Aggregation	DL: 2CA (2x2 MIMO), UL: 2CA (SISO)		
Receive Sensitivity	-96±2 dBm @QPSK, 20MHz, 25°C, -102±2 dBm @ 4RX Diversity		

## MODULATION LEVELS (TDD UL/DL CONFIG 2)

DL MCS	DL Modulation	CQI Index	Theoretical Data Rate
0 - 9	QPSK	1 - 6	6Mbps - 47Mbps
10 - 16	16QAM	7 - 9	59Mbps - 96Mbps
17 - 28	64QAM	10 - 15	100Mbps - 220Mbps

UL MCS	UL Modulation	Theoretical Data Rate
0 - 10	QPSK	0.5Mbps - 7Mbps
11 - 20	16QAM	7Mbps - 17Mbps
21 - 28	64QAM	17Mbps - 30Mbps

## FEATURES

Network Mode	NAT or Bridge
SIM	PIN management, SIM lock
Network Connection	Auto or manual
LTE Scan Mode	Full band scan or frequency lock
VPN	L2TP L2/L3, GRE L2/L3
NAT	Port forwarding, port trigger, DMZ, ALG
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

## LINK BUDGET

Antenna Type	Internal directional, 2T4R
Antenna Gain	14 dBi
Max Transmit Power	26dBm (combined, to regional EIRP limit)
Maximum EIRP	40dBm

## PHYSICAL

IP Protection Rating	IP67
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LED Indicators	MIU, LTE, SIM, LAN, PWR, LTE Signal
USIM	1.8V/3V 2FF
Restore Button	Press for 10 seconds to restore the CPE to its factory settings
Temperature	<ul style="list-style-type: none"><li>Operating Temperature: -40°F to 131°F / -40°C to 55°C</li><li>Storage Temperature: -40°F to 158°F / -40°C to 70°C</li></ul>
Humidity	5%~95%
Power Consumption	<10 W
Power Supply	With PoE Adaptor: <ul style="list-style-type: none"><li>INPUT 100-240VAC</li><li>OUTPUT 24VDC 0.5A</li></ul>
Weight	About 4.4 lbs / 2 kg
Dimensions	9.8 x 9.8 x 3.2 inches / 248 x 248 x 80 millimeters

## WI-FI ALIGNMENT SPECIFICATIONS

Standard	IEEE 802.11b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
MIMO	1x1
Peak Rate	802.11b: 11 Mbps 802.11g: 54 Mbps 802.11n: 150 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	<1 dBi

## GLOBAL PART NUMBERS

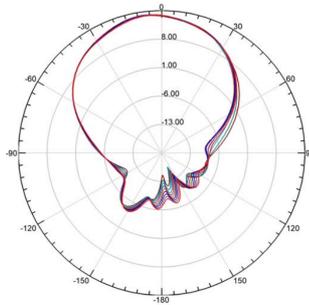
EG7010A-M11	Atom Outdoor Cat6/7, 2T4R, 14 dBi, Band42/43/48, internal directional antenna, 1 GE, PoE 24V, IP67 FCC certification: 2AG32EG7010AM11 (3550-3700 MHz)
EG8013A-M11	Atom Outdoor Cat6/7, 2T4R, 14 dBi, Band42/43/48, internal directional antenna, 1 GE, PoE 24V, IP67 FCC certification: 2AG32EG7010AM11(3550-3700 MHz)

NOTE: Customized versions can be requested.

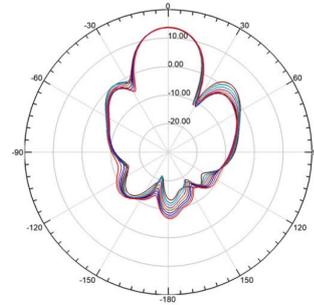
\* Planned for future release

## ANTENNA PATTERN

EG8013A-M11  
EG7010A-M11



H-Pattern



V-Pattern