Atom OD15/OD15 EUD Outdoor CPE

Baicells

INTRODUCTION

The Baicells Atom OD15/OD15 EUD Outdoor High-Gain CPE provides superior performance to bring broadband data and voice services to end-users. It operates on standard LTE TDD, supports multiple bands, and complies with 3GPP Release 12 CAT15 standards.

The Atom OD15 is available in two variants: The Atom OD15, which requires SAS connectivity and CPI certification, and the Atom OD15 EUD, which does not require SAS connectivity or CPI certification.

The CPE design incorporates UL 2x2, DL 4x4 MIMO, and RX diversity, enabling improved cell coverage and high-speed wireless communications. It also supports Carrier Aggregation (CA), which increases data rates and improves overall network performance.

This product comes with a standard product warranty; an extended warranty is available.

FEATURES

Note: Features may vary based on model or region.

- Supports LTE TDD Bands 38/40/41/42/43/48
  - Customization can be requested; contact sales_na@baicells.com
- Complies with 3GPP Release 12 CAT15 standards
- 1000 Mbps Ethernet interface
- Peak data rate of up to 580 Mbps DL and 30 Mbps UL @ 20 MHz (2:7) in a controlled environment
- Supports MCS DL QPSK/16 QAM/64 QAM/256 QAM and UL QPSK/16 QAM/64 QAM

- Built-in LTE directional antenna, 4x4 MIMO
- Power supply with PoE
- GUI-based local and remote web management
- TR069 network management protocol support
- Cell lock, SIM lock, and pin lock
- User-friendly LED status indicators
- Pole- or wall-mounted

BASIC SPECIFICATIONS

LTE Standard	3GPP Release 12, CAT15
ETH LAN Port	1 RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE
LED Indicators	PWR, LTE, LTE Signal
USIM	1.8 V/3 V 2FF
Restore Button	Press for 10 seconds to restore the CPE to its factory settings
Power Supply	Input: Universal range 100-240 VAC Output: PoE (24 VDC)
Safe Voltage Range	24 VDC ± 10%
Dimensions (HxWxD)	14.5 x 14.5 x 2.9 in 368 x 368 x 74 mm
Weight	3.8 lbs / 3500 g

RF SPECIFICATIONS

LTE Mode	TDD
Channel Bandwidth	5/10/15/20 MHz
Carrier Aggregation	DL 2x2 MIMO: 2CC/3CC/4CC CA DL 4x4 MIMO: 2CC CA UL: 2CC CA
MIMO	DL 4x4, UL 2x2
Max Output Power	OD15: 23 ± 2 dBm OD15 EUD: 5 ± 2 dBm
Frequency Bands	OD15: • EG8015G-M11: 42/43/48 • EG8015G-M19: 38/40/41 OD15 EUD: • EG8015G-M11-EUD: 42/43/48 • EG8015G-M19-EUD: 38/40/41
Peak Rate (20 MHz)	DL 580 Mbps, UL 30 Mbps (2:7)
Modulation	DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 77°F / 25°C
Antenna Type	Internal directional, 4x4 MIMO
Antenna Gain	18dBi @3.x GHz 14dBi @2.x GHz
Horizontal Beamwidth	30±5° @3.x GHz, 4 ports
Vertical Beamwidth	25±5° @3.x GHz, 4 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 or frequency lock
VPN	L2TP L2/L3, GRE L2/L3, PPTP
NAT	Port forwarding, port trigger, DMZ, ALG
Firewall	IP/MAC/URL filter; access control; block port scanner/SYN flood; SPI filter
Network Mgmt	TR-069, 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

*Future software release

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
Humidity	5%~95%
IP Protection Rating	IP66

GLOBAL PART NUMBERS

EG8015G-M11	Atom Outdoor CAT15, 2T4R, 3.5 GHz, 18 dBi, B42/43/48 CPE • FCC certification: 2AG32EG8015GM11 (3550-3700 MHz • IC certification: 20982-EG8015GM11 (3450-3650 MHz)
EG8015G-M19	Atom Outdoor CAT15, 2T4R, 2.6 GHz, 14 dBi, B38/40/41 CPE • FCC certification: 2AG32EG8015GM19 (2496-2690 MHZ) • IC certification: 20982-EG8015GM19 (2570-2620 MHz)
EG8015G-M11-EUD	Atom Outdoor CAT15, 2T4R, 3.5 GHz, 18 dBi, B42/43/48 CPE • FCC certification: 2AG32EG8015GM11EUD • IC certification: TBD
EG8015G-M19-EUD	Atom Outdoor CAT15, 2T4R, 2.6 GHz, 14 dBi, B38/40/41 CPE • FCC certification: TBD • IC certification: TBD

Note: For more customized versions, contact sales_na@baicells.com.