

# Atom OD04-19.5 Outdoor UE



## INTRODUCTION

The Baicells Atom OD04-19.5 Outdoor Customer Premise Equipment (CPE) provides superior wireless access performance and comprehensive routing capabilities to bring wireless broadband data and voice services to end-users. Wireless and wired devices, including mobile phones, laptops, tablets, and other smart devices, can access the CPE simultaneously.

## FEATURES

- Supports TDD and FDD LTE network modes
  - TDD bands 38, 40, 41, 42, 43, 48
  - FDD band 7
- Complies with 3GPP Release 9 CAT4 standards
- 100 Mbps Ethernet interface
- Convenient, simple, GUI-based local and remote Web management
- Built-in LTE bipolar directional high-gain antenna
- TR069 network management protocol
- Cell lock, SIM lock, and Pin lock
- User-friendly LED indicators
- Power supply with PoE
- Pole or wall mount
- Wi-Fi assisted alignment

## BASIC SPECIFICATIONS

LTE Standard	3GPP Release 9
Ethernet LAN Port	One 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	Tactile button. Press the button for at least 10 seconds to restore the CPE to its factory settings
Power Supply	Input: Universal range 100V~240V AC Output: PoE (24VDC, 0.5A)
Dimensions	About 9.8 in (H) x 9.8 in (W) x 3.2 in (D) About 248mm * 248mm * 80mm
Weight	About 4 lbs (1800 g)
Color	Pantone white C

## RF SPECIFICATIONS

LTE Mode	TDD / FDD
Channel Bandwidth	5 MHz / 10 MHz / 15 MHz / 20 MHz
MAX Output Power	23± 2dBm
TXRX	1T2R
Frequency Bands	<ul style="list-style-type: none"> <li>• Bands 7/38</li> <li>• Bands 40/41</li> <li>• Bands 42/43/48</li> </ul>
Peak Rate	<ul style="list-style-type: none"> <li>• FDD DL: 100 Mbps, UL: 50 Mbps</li> <li>• TDD DL: 100 Mbps, UL: 10 Mbps (2:7)</li> </ul>
Modulation	<ul style="list-style-type: none"> <li>• UL: QPSK, 16QAM</li> <li>• DL: QPSK, 16QAM, 64QAM</li> </ul>
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 25°C
Antenna Type	Internal directional
Antenna Gain	<ul style="list-style-type: none"> <li>• 19.5 dBi @ 3.x GHz, 2 ports</li> <li>• 14 dBi @ 2.x GHz, 2 ports</li> </ul>
Polarization	±45
Antenna Efficiency	>70%
Isolation	≤-20dB
VSWR	≤2.5
Horizontal Beamwidth (3 dB)	<ul style="list-style-type: none"> <li>• 35 ±5° @ 2.x GHz, 2 ports</li> <li>• 25 ±5° @ 3.x GHz, 2 ports</li> </ul>
Vertical Beamwidth (3 dB)	<ul style="list-style-type: none"> <li>• 35 ±5° @ 2.x GHz, 2 ports</li> <li>• 25 ±5° @ 3.x GHz, 2 ports</li> </ul>

## ADDITIONAL INFORMATION

EG7035E-M1	Bands 40/41
EG7035E-M2	Bands 42/43
EG7035E-M10	Bands 7/38
EG7035E-M11	Bands 42/43/48

## SW SPECIFICATIONS

Network Mode	NAT / Bridge / Tunnel
IP Protocol	IPv4 / IPv6
SIM	PIN management SIM lock
Network Connection Management	Auto / Manual
LTE Scan Mode	Full band scan, frequency lock
WLAN	<ul style="list-style-type: none"> <li>• WPS</li> <li>• MSSID isolation</li> <li>• VLAN</li> </ul>
VPN	<ul style="list-style-type: none"> <li>• L2TP</li> <li>• GRE</li> <li>• PPTP</li> <li>• L2 VxLAN</li> </ul>
NAT	<ul style="list-style-type: none"> <li>• Port forwarding</li> <li>• Port trigger</li> <li>• DMZ</li> <li>• ALG</li> </ul>
Statistics	LAN Link status Transmit / Receive traffic Run time
Firewall	<ul style="list-style-type: none"> <li>• IP / MAC / URL filter</li> <li>• Access control</li> <li>• Block port scanner / SYN flood</li> <li>• SPI filter</li> </ul>
Network Management	<ul style="list-style-type: none"> <li>• TR069</li> <li>• SNMP</li> </ul>
Diagnostics	<ul style="list-style-type: none"> <li>• TCP dump</li> <li>• Ping</li> <li>• Trace route</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>• Date and time setting</li> <li>• Reboot</li> <li>• Restore factory settings</li> <li>• Restore / back up configuration files</li> <li>• Firmware upgrade locally or OTA</li> </ul>
System Logs	<ul style="list-style-type: none"> <li>• Operating</li> <li>• Run-time</li> <li>• Filter / select / display / export</li> </ul>

## WIFI SPECIFICATIONS

Standard	IEEE 802.11 b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
TXRX	1T1R
Peak Rate	<ul style="list-style-type: none"> <li>• 802.11b: 11 Mbps</li> <li>• 802.11g: 54 Mbps</li> <li>• 802.11n: 300 Mbps</li> </ul>
Modulation	DSSS/CCK, OFDM
Receive Sensitivity	<ul style="list-style-type: none"> <li>• -64 dBm @ 65 Mbps, typical for 802.11n</li> <li>• -65 dBm @ 54 Mbps, typical for 802.11g</li> <li>• -76 dBm @ 11 Mbps, typical for 802.11b</li> </ul>
Max Output Power	10 ±3dBm
Antenna Type	Internal omni
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% ~ 95%
Ingress Protection Rating	IP67