

Atom ODo6-19.5 Outdoor UE



INTRODUCTION

The Baicells Atom OD06-19.5 Outdoor User Equipment (UE) provides superior wireless access performance and comprehensive routing capabilities to bring wireless broadband data and voice services to end-users. It is designed exclusively for the fixed wireless market, featuring a spring-locked gasketed door for protecting the SIM slot and eliminating the need for weatherproofing the power and Ethernet connections. Wireless and wired devices, including mobile phones, laptops, tablets and other smart devices, can access the UE simultaneously.

FEATURES

- Supports LTE TDD bands 40, 41, 42, 43, 48, and customized
- Complies with 3GPP Release 10 CAT 6/7 standards
- 1000 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

Atom OD06 – 19.5 Outdoor UE Data Sheet
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- Power supply with PoE
- Pole or wall mount

BASIC SPECIFICATIONS

LTE Standard	3GPP Release 10, CAT 6/7
Ethernet LAN Port	One RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE
LED Indicators	MIU/LTE/SIM/LAN/PWR/LTE SIGNAL
USIM	1.8V/3V 2FF
Restore Button	Tactile button. Press button for at least 10 seconds to restore UE to 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 / TX Ant
TXRX	1T2R / 1T4R 2T2R / 2T4R (uplink enhanced)
Frequency Bands*	Bands 40, 41, 42, 43, 48, and customized

Antenna Gain	11 dBi @ 2.x GHz, 4 ports 14 dBi @ 3.x GHz, 4 ports
Carrier Aggregation*	2CC CA
Peak Rate	DL: 220 Mbps UL: 15 Mbps (2:7)
Modulation	UL: QPSK, 16QAM, 64QAM DL: QPSK, 16QAM, 64QAM
Receive Sensitivity	-94 dBm @ QPSK, 20 MHz, 25°C
Antenna Type	Internal directional
Polarization	±45°
Antenna Efficiency	> 70%
Isolation	≤ -20dB
VSWR	≤ 2.5
Horizontal Beamwidth (3 dB)	• 60 ±5° @ 2.x GHz, 4 ports • 25 ±5° @ 3.x GHz, 4 ports
Vertical Beamwidth (3 dB)	• 35 ±5° @ 2.x GHz, 4 ports • 25 ±5° @ 3.x GHz, 4 ports

*Different models support different frequencies, antennas, and Carrier Aggregation configurations.

SOFTWARE 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	Wi-Fi for UE alignment
VPN	L2TP L2/L3 GRE L2/L3
NAT	Port forwarding Port trigger DMZ ALG
Statistics	<ul style="list-style-type: none"> • LTE status; connection, system up time • Device status • DHCP client list • Wi-Fi station list • LTE status • Firewall status
Firewall	<ul style="list-style-type: none"> • IP / MAC / URL filter • Access control • Block port scanner / SYN flood • SPI filter
Network Management	TR069 TR104 SNMP

Diagnostics	TCP dump Ping Traceroute
Maintenance	<ul style="list-style-type: none"> • Date and time setting • Reboot • Restore factory settings • Restore / back up configuration files • Firmware upgrade locally or OTA
System Logs	Operating Run-time Filter / select / display / export log

WI-FI SPECIFICATIONS

Standard	IEEE 802.11b/g/n
Channel Bandwidth	20/40 MHz
Frequency	2.4 GHz
TXRX	1T1R
Peak Rate	<ul style="list-style-type: none"> • 802.11b: 11 Mbps • 802.11g: 54 Mbps • 802.11n: 300 Mbps
Modulation	DSSS/CCK, OFDM
Receive Sensitivity	<ul style="list-style-type: none"> • -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 ± 3dBm
Antenna Type	Internal omni
Antenna Gain	0 dBi

ENVIRONMENT 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 NUMBER

EG7010A-M19	Atom OD06 2.5 GHz 11 dBi Outdoor CPE - Cat 6, 2T4R, 11 dBi antenna, Bands 38/40/41
EG7010A-M11	Atom OD06 3.5 GHz 14 dBi Outdoor CPE Cat 6, 2T4R, 14 dBi antenna, Bands 42/43/48