



INTRODUCTION

Baicells 5G indoor CPE supports two network architectures, 5G Standalone (SA) and non-Standalone (NSA), with faster transmission speed, better bearing capacity and lower network delay.

CPE supports 5G Sub6 band access to base station, LAN side supports WiFi6 access, providing perfect experience for customers in laptop, gateway, industrial monitoring, telemedicine, unmanned aerial vehicle (UAV), virtual reality and immersive experience (VR and AR).

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

HIGHLIGHTS

NOTE: Features can vary based on model or region.

- 5G SA/NSA Dual mode
- Supports NR Bands
N1/N3/N5/N7/N8/N20/N28/N38/N40/
N41/N66/N77/N78
- Supports TDD Bands
B38/B40/B41
- Supports LTE FDD Bands
B1/B2/B3/B4/B5/B7/B8/B20/B28/B66
- Complies with 3GPP Release 15 standards
- 1000 Mbps Ethernet interface
- Supports WiFi6 AX1800, dual-bands
- Peak data rate of up to NR SA DL 2000 Mbps, UL 1000 Mbps; NR NSA DL 2600Mbps, UL 650Mbps
- 256QAM for DL and 256QAM for UL as the highest order modulation formats.
- Built-in Omni-directional 5G and Wi-Fi antennas
- 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
- Transparent bridge mode (L2 Support).
- Built in battery 4400mAh*(Optional)

TECHNOLOGY

Standard	3GPP Release15
Mode	TDD/FDD
Channel Bandwidth	NR: 5~100 MHz LTE: 60 MHz as maximum aggregated bandwidth (3 CC) EN-DC: 60+100 MHz (3DL + FR1)
Multiplexing	LTE: DL 2x2 MIMO NR: DL 4x4 MIMO, UL 2x2MIMO
Security	Firewall: IP/MAC/URL filter; ACL rule

INTERFACE

Ethernet Interfaced	3 RJ-45 port 10/100/1000 auto-sensing, auto-MDX, WAN/LAN
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		DL (Mbps)	UL (Mbps)
	NR SA	Max. 2000	Max. 1000
	NR NSA	Max. 2600	Max. 650
	LTE	Max. 600	Max. 150
Modulation	DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM, 256QAM		
Carrier Aggregation	LTE: Up to 3DL / 2UL EN-DC: Up to LTE 3DL + FR1		
Transmit Power	Power Class 3 (23dBm±1.5dBm) for LTE Bands Power Class 3 (23dBm±1.5dBm) for NR Bands Power Class 2 (26dBm±1.5dBm) for B41/N41/N77/N78		
Receive Sensitivity	N41 (100MHz), -85dBm		

	N78 (100MHz), -86dBm
--	----------------------

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 omni , 2T4R
Antenna Gain	2~6 dBi
Max Transmit Power	LTE: 26dBm for B41, otherwise 23dBm. NR12: 26dBm for N41/77/78, 26dBm for N38/40, otherwise 23dBm (combined, to regional EIRP limit)
Maximum EIRP	26dBm~32dBm

PHYSICAL

LED Indicators	Power, WLAN, Internet, Cellular
USIM	1.8V/3V 4FF
Restore Button	Press for 10 seconds to restore the CPE to its factory settings
WPS Button	Press for WPS or Easy Mesh* configuration
Power Switch	Push 1.5s for ON/OFF
Temperature	- Operating Temperature: 14°F to 113°F / -10°C to 45°C - Storage Temperature: -4°F to 158°F / -20°C to 70°C

Humidity	5%~95%
Power Consumption	<20 W
Power Supply	With DC Adaptor: • INPUT 100-240VAC • OUTPUT 12VDC 2A
Weight	About 1.98lbs/0.9kg
Dimension	About 98 x 108 x 227millimeters

WI-FI SPECIFICATIONS

Standard	IEEE 802.11b/g/n/ax
Channel Bandwidth	20MHz,40MHz,80 MHz
Frequency	2.4 GHz, 5GHz
MIMO	2x2
Peak Rate	802.11b: 11Mbps 802.11g: 54Mbps, 802.11n: 300mbps, 802.11ac: 867Mbps 802.11ax 5G: 1200Mbps 802.11ax 2.4G: 574Mbps
Modulation	DSSS/CCK, OFDM
Receive Sensitivity	802.11b BW20 : -99.5dBm (1M), -91dBm (11M) 802.11g BW20 : -96dBm (6M), -78dBm (54M) 802.11n: HT20 : -95.5dBm (MCS0), -75dBm (MCS7) 802.11n: HT40 : -93dBm (MCS0), -72dBm (MCS7) 802.11ac: VHT20: -95.5dBm (MCS0), -71dBm (MCS9) 802.11ac: VHT40: -93dBm (MCS0), -69dBm (MCS9) 802.11ax: HE20: -95.5dBm (MCS0), -65.5dBm (MCS11) 802.11ax: HE40: -93dBm (MCS0), -63dBm (MCS11)
Max Output Power	20 dBm * 2 + 20 dBm * 2
Antenna Type	Internal omni 2T2R

Photon ID63M EG3975M



Antenna Gain	3-5 dBi
Users	128

MODEL NUMBERS

EG3975M-NR15	Photon ID63M Indoor NR CPE, 2T4R, 2~6 dBi, internal omni antenna, 1 GE*3 , DC 12V 2A, Built in battery 4400mAh 5G Sub-6: N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N66/N77/N78 LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28/B66 LTE TDD: B38/B40/B41
--------------	---

NOTE: Customized versions can be requested.

* Planned for future release