

Photon ID63W EG3985W

Indoor Customer Premise Equipment Datasheet

Baicells
Connect More with Less



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, 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/
N77/N78
- Supports LTE TDD Bands
B38/B40/B41/B42/B43
- Supports LTE FDD Bands
B1/B3/B5/B7/B8/B20/B28/B32
- Complies with 3GPP Release 15 standards
- Peak data rate of up to NR SA DL 4.67Gbps, UL 1.25Gbps; NR NSA DL 3.74Gbps, UL 1.46Gbps
- 1000 Mbps Ethernet interface
- Supports WiFi6 AX3000, dual-bands
- 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).
- Wall mounted

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TECHNOLOGY

Standard	3GPP Release15
Mode	TDD/FDD
Channel Bandwidth	5~100MHz
Frequency Bands	N1/N3/N5/N7/N8/N20/N28/N38/N40/N41//N71/N75/N76/N77/N78 B1/B3/B5/B7/B8/B20/B28/B32/B71/B38/B40/B41/B42/B43
Multiplexing	NR: DL 4x4 MIMO, UL 2x2MIMO
Security	Firewall: IP/MAC/URL filter; ACL rule

INTERFACE

Ethernet Interfaced	LAN: 4 * RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE Out
Power Jack	12/24/48 Phoenix Head Power Supply
POE Power	WAN: 1 * RJ-45 port 10/100/1000 auto-sensing, auto-MDX, PoE In 48V
USIM	4FF, 1.8V/3.0V USIM Card Optional eSIM inside
PTHA	1 * RJ-45 Pass through

PERFORMANCE

Peak Rate		DL (Mbps)	UL (Mbps)
	NR SA	Max. 4650	Max. 1250
	NR NSA	Max. 3740	Max. 1460
	LTE	Max. 1600	Max. 211
Modulation	DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM, 256QAM		
Carrier Aggregation	NR SA: Up to 2DL LTE: 5CC CA		
Transmit Power	Power Class 2 (26dBm±1.5dBm)		
Receive Sensitivity	-86dBm		

FEATURES

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Network Mode	NAT or Bridge
SIM	PIN management, SIM lock
Network Connection	Auto or manual
LTE Scan Mode	Full band scan or frequency lock
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	2~6dBi
Max Transmit Power	NR:26dBm x2

PHYSICAL

LED Indicators	LTE, SIM, LAN, PWR, LTE Signal
USIM	1.8V/3V 4FF
Restore Button	Press for 10 seconds to restore the CPE to its factory settings
Temperature	- 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%
Power Consumption	<24 W
Power Supply	With DC Adaptor: - INPUT 100-240VAC - OUTPUT 12VDC 2A
Weight	About 400g
Dimensions	160 x 86 x 36mm

WI-FI SPECIFICATIONS

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Standard	IEEE 802.11b/g/n/ax
Channel Bandwidth	20MHz,40MHz,80 MHz,160MHz
Frequency	2.4 GHz, 5GHz
MIMO	2x2
Peak Rate	802.11b: 11Mbps 802.11g: 54Mbps, 802.11n: 300mbps, 802.11ac: 867Mbps 802.11ax 5G: 2400Mbps 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
Antenna Gain	3-5 dBi
Users	128