

Photon OD63G EG8066G

Outdoor Customer Premise Equipment Datasheet

Baicells
Connect More with Less



INTRODUCTION

Baicells 5G outdoor 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 N41/N48/N78
- Supports TDD Bands B41/B42/B43/B48(CBRS)
- Complies with 3GPP Release 16 standards
- 2500 Mbps Ethernet interface
- Peak data rate of up to NR SA DL 2400 Mbps, UL 900 Mbps; NR NSA DL 3400Mbps, UL 555Mbps
- 256QAM for DL and 256QAM for UL as the highest order modulation formats.
- Built-in bipolar directional 5G antenna
- 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
- Pole or wall mounted
- Transparent bridge mode* (L2 Support).

Photon OD63G EG8066G

Outdoor Customer Premise Equipment Datasheet



TECHNOLOGY

Standard	3GPP Release16
Mode	TDD/FDD
Channel Bandwidth	NR: 5~100 MHz LTE: 100 MHz as maximum aggravated bandwidth (5 CC) EN-DC: 80+100 MHz (4 DL + FR1)
Frequency Bands	N41 (2496 MHz - 2690 MHz) N48 (3550 MHz - 3700 MHz) N78 (3300 MHz - 3800 MHz) B41 (2496 MHz - 2690 MHz) B42 (3400 MHz - 3600 MHz) B43 (3600 MHz - 3800 MHz) B48 (3550 MHz - 3700 MHz)
Multiplexing	LTE: DL 4x4 MIMO NR: DL 4x4 MIMO, UL 2x2MIMO
Security	Firewall: IP/MAC/URL filter; ACL rule

INTERFACE

Ethernet Interfaced	1 RJ-45 port 10/100/2500 auto-sensing, auto-MDX, PoE 1 RJ-45 port 10/100/1000 auto-sensing
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. 2400	Max. 900
	NR NSA	Max. 3400	Max. 555
	LTE	Max. 1600	Max. 211

Photon OD63G EG8066G

Outdoor Customer Premise Equipment Datasheet



Modulation	DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM, 256QAM
Carrier Aggregation	LTE: Up to 5DL / 4UL EN-DC: Up to LTE 5DL + NR 1DL or LTE 2DL + NR 2DL / LTE 3UL + NR 1UL NR SA: Up to 2DL* / 2UL
Transmit Power	Power Class 3 (23dBm $\pm$ 1.5dBm) for LTE Bands Power Class 3 (23dBm $\pm$ 1.5dBm) for NR Bands Power Class 2 (26dBm $\pm$ 1.5dBm) for B41/B48*/N41/N48*/N77
Receive Sensitivity	N41 (100MHz), -85dBm N48 (20MHz), -94dBm N77 (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
CBRS	Automatic installation of CBSD certificate*

LINK BUDGET

Antenna Type	Internal directional, 2T4R
Antenna Gain	NR41: 13dBi NR48/NR78/B42/B43: 17dBi
Max Transmit Power	N41/B41 26dBm.

Photon OD63G EG8066G

Outdoor Customer Premise Equipment Datasheet



	N48/B48 23dBm. B42/B43/N78 26dBm
Maximum EIRP	N41/B41 39dBm. N48/B48 40dBm. B42/B43/N78 43dBm

PHYSICAL

IP Protection Rating	IP67
LED Indicators	MIU, 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 PoE Adaptor: - INPUT 100-240VAC - OUTPUT 24/48VDC 1A
Weight	About 7.3lbs / 3.47kg
Dimensions	200 x 48 x 163 mm

MODEL NUMBERS

EG8066G-S41	Photon OD63H Outdoor NR CPE, 2T4R,13 dBi, internal directional antenna, 2.5 GE, PoE 24V/48V, IP67 5G Sub-6: N41 LTE TDD: B41 - FCC certification: TBD - IC certification: TBD
EG8066G-NR19	Photon OD63H Outdoor NR CPE, 2T4R,13 dBi, internal directional antenna, 2.5 GE, PoE 24V/48V, IP67 5G Sub-6: N38/N40/N41 LTE TDD: B38/B40/B41

Photon OD63G EG8066G

Outdoor Customer Premise Equipment Datasheet

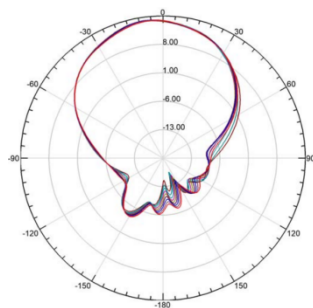


	FCC certification: TBD IC certification: TBD
EG8066G-NR11	Photon OD63H Outdoor NR CPE, 2T4R, 17 dBi, internal directional antenna, 2.5 GE, PoE 24V/48V, IP67 5G Sub-6: N48/N77/N78 LTE TDD: B42/43/48 FCC certification: TBD IC certification: TBD

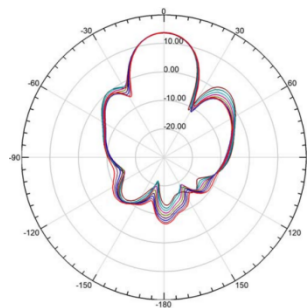
NOTE: Customized versions can be requested.

* Planned for future release

ANTENNA PATTERN



H-Pattern



V-Pattern