

### **CONNECTING COMMUNITIES THROUGH**

### **WIRELESS SOLUTIONS**



BLING NO RES

FWC-122HG-35

SUMMARY



# FWC-122HG-35



# CATEGORY 12 SINGLE MODE OUTDOOR CPE

BLiNQ's FWC-122HG-35 is a Category 12 outdoor LTE CPE that supports 40 MHz carrier aggregation. Its internal high gain antenna promises to maximize reach and capacity.

Featuring a password protected built-in web server, this high performing CPE can be configured with ease from anywhere in the world.



256QAM Downlink



802.3at POE Powered



2x2 MIMO with 80 MHz CA Max.



Supports 1.8V and 3V SIM/USIM

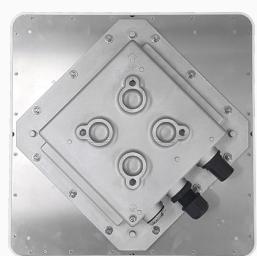




#### HERE ARE SOME KEY FEATURES:

- Supports TDD-LTE Band 48, 42/43
- 3GPP Release 12 Compliant
- Supports up to UE LTE Category 12/13/15 PHY Rate \*
- Supports 4x4 MIMO with 40 MHz CA Max.
- Supports DL 256QAM with DL 2x2 MIMO only up to 20 MHz CA
- up to 80 MHz CA
- Supports UL 2Tx (CDD / UL\_CA/ UL\_MIMO)
- Physical 2Tx & 4Rx in RF Front End
- Supports 1.8V/3V SIM and USIM Card for LTE Mode
- **Supports Dynamic Host Configuration Protocol**
- Built-in Web Server for Web-Based Configuration
- Password Protected Access and Configuration
  - Supports IEEE 802.3, IEEE 802.3u, 802.3ab (10/100/1000 Mbps)
- 802.3at POE standard
- Supports NAT/Tunnel/Bridge/Router Mode
- Supports VPN Pass-Through
  - **IP67 Environmental Rating**





<sup>\*</sup> TDD Cat 12 with 4x4 + 40 MHz carrier aggregation peak throughput is around 440 Mbps for downlink @ TDD Config 2 SSF 7 and UL CA + 64QAM is around 30 Mbps.





~~~

| MECHANICAL       | ., ENVIRONMENTAL & REGULATORY |                                                      |  |
|------------------|-------------------------------|------------------------------------------------------|--|
|                  | Dimension (L x W x H)         | 13.4" x 13.4" x 2.95" (340 mm x 340 mm x 75 mm)      |  |
|                  | Weight                        | 4.41 lbs (2 kg)                                      |  |
|                  | PoE                           | 802.3at                                              |  |
|                  | Power                         | Input: Universal range 100~240V AC Output: 56 VDC    |  |
|                  | Reset/Reboot Button           | Tactile Switch (inside box)                          |  |
|                  | Operating Humidity            | 5% to 95%                                            |  |
|                  | Storage Humidity              | 5% to 95%                                            |  |
|                  | Operational Temperature       | -40°F to 131°F (-40°C to 55°C)                       |  |
|                  | Storage Temperature           | -40°F to 158°F (-40°C to 70°C)                       |  |
|                  | FCC                           | FCC Part 96 Certified                                |  |
|                  | LTE                           | EN 301 908-13 V11.1.1                                |  |
|                  | Safety                        | IEC 60950-22:2016, IEC 62368-1:2014 compliant        |  |
|                  | EMC                           | EN 301 489-1 / -4 / -17 / -24                        |  |
|                  | Environmental                 | IP67                                                 |  |
|                  | CBRS                          | CBSD Cat. B                                          |  |
| NETWORKING & OAM |                               |                                                      |  |
|                  | LTE BB ASIC                   | GDM7243A (GCT Semiconductor)                         |  |
|                  | LTE RF ASIC                   | GRF7243A (GCT Semiconductor)                         |  |
|                  | Ethernet LAN Port             | 1 x RJ-45 Port<br>10/100/1000 Auto-Sensing, Auto-MDX |  |
|                  | LED Indicators                | Signal Strength / LAN / SIM                          |  |
|                  | SIM Function                  | 1.8V, 3V SIM and USIM card                           |  |
|                  | PIN/PUK Code                  | Yes (Ready with chipset)                             |  |
|                  | Stack                         | IPv4, IPv6, Dual                                     |  |







|                     | NAT/Dynamic NAT                    | Yes                                          |
|---------------------|------------------------------------|----------------------------------------------|
|                     | Router Mode                        | Yes                                          |
|                     | Bridge Mode                        | Yes                                          |
|                     | Tunnel Mode                        | GRE, L2TP, L2TP with IPsec, PPTP             |
|                     |                                    |                                              |
|                     | DCHP Server in LAN                 | Yes (For NAT mode, support 253 clients max.) |
|                     | DNS Relay                          | Yes (For NAT mode)                           |
|                     | DDNS Client                        | Yes (For NAT mode)                           |
|                     | VPN Pass-Through - IPSec/PPTP/L2TP | Yes (For NAT mode)                           |
|                     | UPNP                               | Yes                                          |
|                     | HTTP(s) Server                     | Yes                                          |
|                     | ALG Support (FTP/SIP/)             | Yes                                          |
|                     | Networking Debug/Testing           | IPerf, Ping, Traceroute                      |
| RADIO SPECIFICATION |                                    |                                              |
|                     | Peak DL Throughput                 | 440 Mbps (4x4 + 40 MHz CA, TDD Config 2-7)   |
|                     | Peak UL Throughput                 | 30 Mbps (TDD Config 2-7 with 64 QAM)         |
|                     | Carrier Aggregation                | 2CC up to 20 MHz each                        |
|                     | Frequency Band                     | TDD LTE Band 48, 42/43                       |
|                     | DL Carrier Aggregation Bandwidth   | 80 MHz max.                                  |
|                     | UL Carrier Aggregation Bandwidth   | 40 MHz max. with 2CC                         |
|                     | UL 2Tx Diversity                   | 23 dBm                                       |
|                     | UL 2Tx CA                          | 23 dBm                                       |
|                     | UL 2Tx MIMO                        | 23 dBm                                       |
|                     | Tx Power Dynamic Range             | 63 dB                                        |
|                     | Receiver Sensitivity (@ 20 MHz)    | -95 dBm                                      |
|                     | Channel Bandwidth                  | 10, 20 MHz                                   |

## FWC-122HG-35 SPECIFICATIONS





|                              | DL Carrier Aggregation Matrix   | DL MIMO 2x2 – Intra, Contiguous & Non-Contiguous DL MIMO 4x4 – Intra Band Only            |
|------------------------------|---------------------------------|-------------------------------------------------------------------------------------------|
|                              | DL Modulation                   | 4x4 MIMO with 64 QAM Max.<br>2x2 MIMO with 256 QAM Max.                                   |
|                              | UL Modulation                   | Max. 64 QAM                                                                               |
|                              | LTE Compliance                  | 3GPP Release 12                                                                           |
|                              | Antenna Peak Gain               | 15 dBi                                                                                    |
| DEVICE MANAGEMENT & SECURITY |                                 |                                                                                           |
|                              | WEB                             | Yes                                                                                       |
|                              | SNMP                            | Ready for IoT                                                                             |
|                              | TR-069                          | Ready for IoT                                                                             |
|                              | FOTA Upgrade                    | Yes                                                                                       |
|                              | System Log/Diagnostic           | Yes (Chipset embedded tool)                                                               |
|                              | Username/Password Configuration | Yes                                                                                       |
|                              | L2/L3 Firewall                  | Basic Firewall/Port Forwarding/Port Trigger/DMZ/Remote WAN Ping/Remote Web Access Control |
|                              | Time Zone Configuration         | Yes                                                                                       |
|                              | Dual Firmware                   | Yes (Switchable)                                                                          |
|                              | Firmware Verification           | Yes (Use digital signal to verify installed software)                                     |

