



CONNECTING COMMUNITIES THROUGH  
**WIRELESS SOLUTIONS**



**FWC-145IN-35**  
~~~~~ (CAT. A AND EUD VARIANT)



## FWC-145IN-35

### SUMMARY



# FWC-145IN-35



## CATEGORY 12 HIGH SPEED INDOOR CPE



**256QAM  
Downlink**



**Multiple  
Connections/Ports**



**Supports 1.8V  
and 3V SIM/USIM**

BLiNQ's FWC-145IN-35 Indoor CPE is a Category 12/13 Single Mode CPE that supports BLiNQ's FW-300i, FW-600 and X-300i solutions. Complying with the IEEE 802.11 wireless standard, this indoor CPE features gigabit Ethernet ports for fast and efficient connections.

With an easy, simple installation and a fully automated deployment, this CPE is the perfect solution for any indoor setting.

2 SKUs available:

- FWC-145IN-35 (CBSD CAT. A Certified)
- FWC-145IN-35E (EUD Certified)

# FWC-145IN-35

## SUMMARY

### HERE ARE SOME KEY FEATURES:

- Supports TDD-LTE Band 42/43 & 48\*
- 3GPP Release 12 Compliant
- Supports up to UE LTE Downlink Category 12 / Uplink Category 13 PHY Rate\*\*
- Supports 4x4 MIMO with 40 MHz CA Max.
- Supports DL 256QAM with DL 2x2 MIMO only up to 4 Carrier Aggregation
- Supports UL 2Tx (CDD / UL\_CA/ UL\_MIMO)
- Physical 2Tx & 8Rx in RF Front End
- Supports 1.8V and 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 )
- Supports up to 2 RJ45 Giga Ethernet Ports
- Supports NAT/Tunnel/Bridge/Router Mode
- Supports VPN Pass-Through and End Point
- Supports 802.11b/g/n (2 x 2) Wi-Fi Technology
- Supports 802.11ac Wave 2 (2 x 2) Wi-Fi Technology

\* FCC Certified for only Band 48

\*\* TDD Cat 12 with 4x4 + 40 MHz carrier aggregation peak downlink throughput is around 440 Mbps @ TDD Config 2 SSF 7 with 64QAM; uplink throughput is around 30 Mbps @ 20+20 MHz TDD Config 2 SSF 7 with 64QAM.



# FWC-145IN-35

## SPECIFICATIONS

| MECHANICAL, ENVIRONMENTAL & REGULATORY |                                                            |                   |
|----------------------------------------|------------------------------------------------------------|-------------------|
|                                        | FWC-145IN-35                                               | FWC-145IN-35E     |
| Dimension (H x D)                      | 7.9" x 5.3" (200 mm x 134 mm)                              |                   |
| Weight                                 | 1.1 lbs (0.5 kg)                                           |                   |
| Power                                  | Input: Universal range 100~240V AC<br>Output: 12 V/1.5A DC |                   |
| Reset/Reboot Button                    | Tactile Switch (inside box)                                |                   |
| Operating Humidity                     | 0% to 95%                                                  |                   |
| Storage Humidity                       | 0% to 95%                                                  |                   |
| Operational Temperature                | 32°F to 104°F (0°C to 40°C)                                |                   |
| Storage Temperature                    | -4°F to 140°F (-20°C to 60°C)                              |                   |
| Radio (LTE)                            | FCC Part 96                                                | FCC Part 96 (EUD) |
| Radio (Wi-Fi 2.4 GHz)                  | FCC Part 15C                                               | FCC Part 15C      |
| Radio (Wi-Fi 5 GHz)                    | FCC Part 15E                                               | FCC Part 15E      |
| CBSD                                   | Category A                                                 | EUD               |
| NETWORKING & OAM                       |                                                            |                   |
| LTE BB ASIC                            | GDM7243A (GCT Semiconductor)                               |                   |
| LTE RF ASIC                            | GRF7243A (GCT Semiconductor)                               |                   |
| 11b/g/n Wi-Fi SoC                      | RTL8192ES (Realtek)                                        |                   |
| 11ac Wi-Fi SoC                         | RTL8812BEH (Realtek)                                       |                   |
| Ethernet LAN Port                      | 2 x RJ45 Port; 10/100/1000 Auto-Sensing, Auto-MDX          |                   |
| LED Indicators                         | Signal Strength / LAN / Wi-Fi / SIM / Power                |                   |
| 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, IPsec, PPTP (Available per request)             |                   |

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## SPECIFICATIONS



|                                           |                                                                                                                                                            |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DCHP Server in LAN</b>                 | Yes (253 clients max.)                                                                                                                                     |
| <b>DNS Relay</b>                          | Yes                                                                                                                                                        |
| <b>DDNS Client</b>                        | Yes                                                                                                                                                        |
| <b>VPN Pass-Through – IPSec/PPTP/L2TP</b> | Yes                                                                                                                                                        |
| <b>UPNP</b>                               | Yes                                                                                                                                                        |
| <b>HTTP(s) Server</b>                     | Yes                                                                                                                                                        |
| <b>ALG Support (FTP/SIP/etc...)</b>       | Yes                                                                                                                                                        |
| <b>Networking Debug/Testing</b>           | IPerf, Ping, Traceroute                                                                                                                                    |
| <b>RADIO SPECIFICATION</b>                |                                                                                                                                                            |
| <b>Frequency Band</b>                     | TDD LTE Band 48, 42/43*                                                                                                                                    |
| <b>LTE Compliance</b>                     | 3GPP Release 12                                                                                                                                            |
| <b>Channel Bandwidth</b>                  | 10, 20 MHz                                                                                                                                                 |
| <b>Peak DL Throughput</b>                 | 440 Mbps (TDD Config 2-7)                                                                                                                                  |
| <b>Peak UL Throughput</b>                 | 30 Mbps (TDD Config 2-7 with 64 QAM)                                                                                                                       |
| <b>Carrier Aggregation</b>                | DL - 4CC up to 20 MHz each (w. DL 2x2)<br>DL - 2CC up to 20 MHz each (w. DL 4x4)<br>DL - 1CC up to 20 MHz each (w. DL 4x8)<br>UL - Maximum 40 MHz with 2CC |
| <b>DL Carrier Aggregation Bandwidth</b>   | 80 MHz max.                                                                                                                                                |
| <b>UL Carrier Aggregation Bandwidth</b>   | 40 MHz max. with 2CC                                                                                                                                       |
| <b>UL 2Tx Diversity</b>                   | 23 dBm                                                                                                                                                     |
| <b>UL 2Tx CA</b>                          | 23 dBm                                                                                                                                                     |
| <b>UL 2Tx MIMO</b>                        | 23 dBm                                                                                                                                                     |
| <b>Tx Power Dynamic Range</b>             | 63 dB                                                                                                                                                      |
| <b>Receiver Sensitivity (@ 20 MHz)</b>    | -96 dBm                                                                                                                                                    |
| <b>MIMO</b>                               | DL 2x2 / 4x4 / 8x4<br>UL 1x2 (with diversity); UL 2x2                                                                                                      |
| <b>DL Modulation</b>                      | 4x4 MIMO with 64QAM Max.<br>2x2 MIMO with 256QAM Max.                                                                                                      |
| <b>UL Modulation</b>                      | Max. 64 QAM                                                                                                                                                |

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## SPECIFICATIONS



| USER INTERFACE & SECURITY              |                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------|
| <b>WEB</b>                             | Yes                                                                                       |
| <b>SNMP</b>                            | Yes                                                                                       |
| <b>TR-069</b>                          | Ready for IoT                                                                             |
| <b>TR-0143</b>                         | Ready for IoT                                                                             |
| <b>FOTA Upgrade</b>                    | Yes                                                                                       |
| <b>System Log/Diagnostic</b>           | Yes (Chipset embedded tool)                                                               |
| <b>Username/Password Configuration</b> | Yes                                                                                       |
| <b>L2/L3 Firewall</b>                  | Basic Firewall/Port Forwarding/Port Trigger/DMZ/Remote WAN Ping/Remote Web Access Control |
| <b>Time Zone Configuration</b>         | Yes                                                                                       |
| <b>Firmware</b>                        | Dual Image (Switchable)                                                                   |
| <b>Firmware Verification</b>           | Yes (Use digital signal to verify installed software)                                     |



A wide-angle photograph of a city skyline at sunset. The sky is filled with large, dramatic clouds, some of which are illuminated from below by the setting sun, creating a warm orange and yellow glow. The city skyline is composed of numerous high-rise buildings of various architectural styles, including modern glass skyscrapers and older, more traditional structures. In the foreground, a green-painted steel truss bridge spans a body of water. The bridge has a distinctive green color and a series of arches. The water is calm, reflecting the light from the sky. The overall scene is a mix of urban architecture and natural elements, captured during the 'golden hour' of sunset.

# YOUR NETWORK. OUR SOLUTIONS.

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