

5G Indoor FWA CPE (Sub6GHz, EU Variant) FCP-5100-I32A



INTRODUCTION

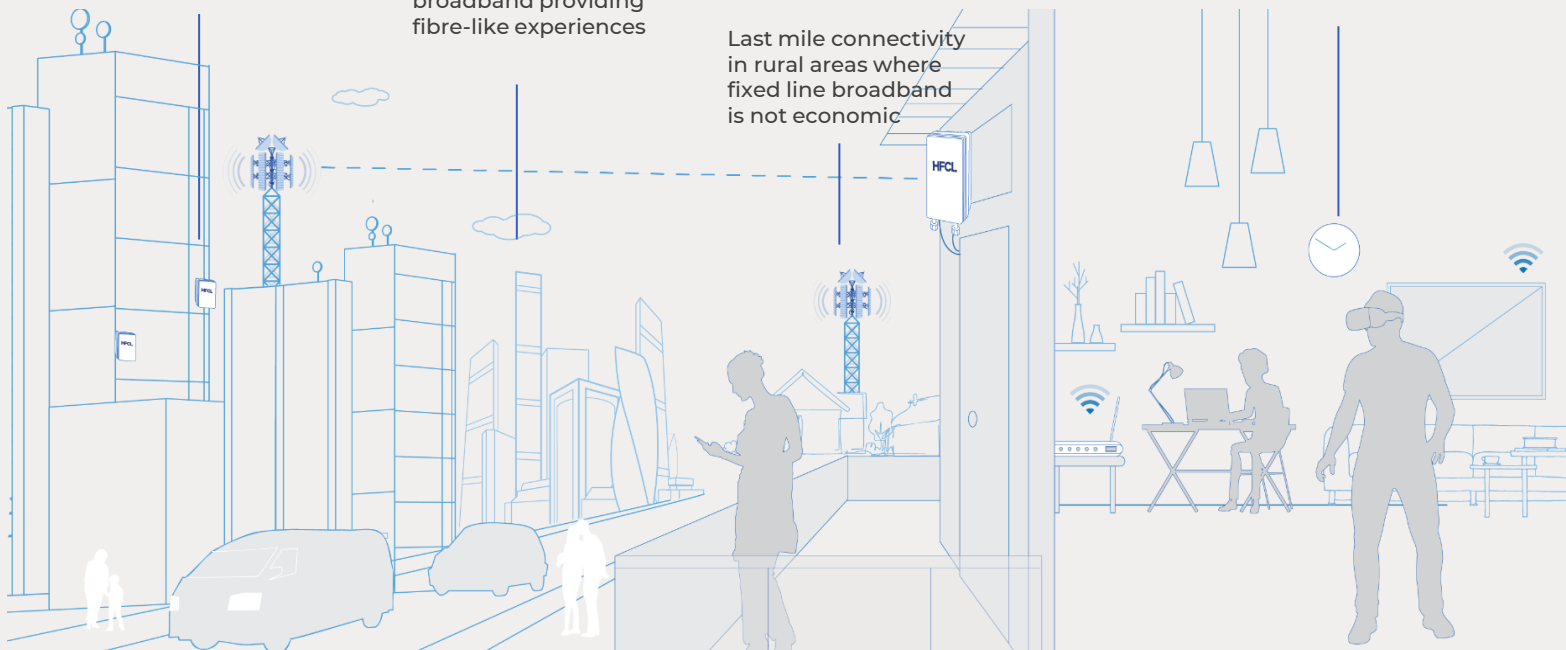
The HFCL 5G Indoor FWA-CPE is a path breaking home and enterprise solution that offers high speed 5G wireless internet at the last mile. It supports entire range of Sub6 GHz frequency and designed to work in 5G SA & NSA architecture both. Having support of two Carrier component aggregation and throughput greater than 1 Gbps make it a preferred choice for Operators and end users. It has inbuilt Wi-Fi6 with 4x4 Omini antennas which provide excellent indoor coverage within premises. It is a Plug and Play device having fully automated Configuration and managed via TR069. With the lower TCO and expedited time to market, it is a perfect product for CSPs and ISPs which unlocks a plethora of revenue streams.

APPLICATIONS

Broadband for Enterprises, SOHO, Campus especially in dense urban areas

Strong substitute of fixed wireline broadband providing fibre-like experiences

Residential broadband in urban and suburban areas as MDU Broadband CPE



Provides fibre like throughput in Gbps



Support for both 5G SA & NSA (ENDC)



Supports Wi-Fi on 2.4 and 5.0 GHz



Different choices of Frequency bands in NR and LTE



Lightweight, compact size with minimum power consumption



Mobile app for self-installation that shows best location with strong signal reception

Hardware Specifications

General	· Cellular LTE, 5G (SA / NSA) Indoor CPE.
3GPP standard	· 3GPP R15 support
Operating bands	NR : n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78 LTE:B1/B3/B5/B7/B8/B20/B28/B32/B38/B40/B41/B42/B43
Antenna (FR1)	· 2T4R · Power Class: 2 (26dBm) · Gain: 9 dBi · EIRP: 35 dBm
Modem (FR1)	· 5G/NR FR1 · Channel Bandwidth per carrier (MHz)- 10 , 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 · Aggregated Throughput : > 1 Gbps (DL:UL = 4:1 & Configurable) · CA: 2CC · Modulation: DL: 256QAM; UL: 256QAM
Antenna (LTE)	· Power Class: 2 (26dBm) · Gain: 3 dBi · EIRP: 29 dBm
Modem (LTE)	· Channel Bandwidth per carrier (MHz)- 5, 10 , 15, 20 · Aggregated Throughput : > 125 Mbps · CA: 5CC DL, 2CC UL · Modulation: DL: 256QAM; UL: 64QAM
WiFi / WLAN	· 2.4GHz, 5GHz · 4x4 Omni, EIRP 28 dBm BLE: 1Tx1R · Support 802.11 a/b/g/n/ac/ax standards · Wi-Fi 6 UL/DL MU-MIMO · BLE: 5.0 · MESH: Easy Mesh R2 Controller mode · Multiple SSID/guest Wi-Fi support · Connects, up to 128 Wi-Fi enabled devices · Supports Wi-Fi Multimedia (WMM) wireless QoS · 20/40/80 MHz Bandwidth · Channel adaption · WPS: PBC modes
SIM	· 1x Nano 4FF SIM slots or 1x e-SIM & USIM)
External Interface	· 1 x2.5 GE WAN Port, 3 x1 GE LAN Port · 1 x USB 2.0 (Type-A, Out: 1A) · 1 x Power Port
Button and Switches	· 1x Power On/Off button · 1x Reset button · Wireless On/Off and WPS push button
LED Display	· Multicolour, Wi-Fi, 5G Signals
Mounting Option	· Tabletop
Ingress Protection	· IP32
Ambient Temp	· 0 C to +45 C
Power	· Input: 12V DC (Via AC to DC adaptor) · Power consumption: 20 Watt · Passive cooled
Mechanical	· Weight: 1 Kg · Volume: 3 L · Dimension (LxWxD): 220x180x75 mm ³
Regulatory/Certification	· RoHS, WPC ETA, EMI/EMC, WEEE, EMF · PTCRB/GCF (R15 3GPP), RF conducted report as per 3GPP

<p>General Security requirement</p>	<ul style="list-style-type: none"> · Encrypted configuration backup/restore · Built-in advance stateful firewall with adjustable settings and rules · Defence of DoS/ARP attacks/Port scan · Anti CSRF (OWASP) · Open VPN · Ipsec VPN · IP pass-through · AES 256 encryption
<p>Admin Security</p>	<ul style="list-style-type: none"> · Password hash · Session timeout · Wi-Fi on/off control · Incorrect password lockout · Wi-Fi security (Open, WPA/WPA2/WPA3)
<p>WiFi</p>	<ul style="list-style-type: none"> · Wi-Fi Protected Setup (WPS 2.0) EAP TLS/EAP TTLS/EAP PEAP/EAP SIM/EAP AKA · Wi-Fi privacy separation · Configurable DNS · MAC address filtering · NAT firewall · Port filtering · Bridge/Router Mode · NAT, PAT, multimedia applications, Static routing, and RIP-1/2 · SNTP and NTP · IGMP snooping and IGMP proxy · NAPT, Port Forwarding, DMZ and Virtual Server Support · ICMP, IP filter, ·UPnP · VPN Pass-through support (PPTP, L2TP & IPsec) · IPv4, IPv6, IPv4 / IPv6 dual stack · IPv6 in IPv4 (6RD) / IPv4 in IPv6 (DS-Lite) / IPv6-464XLAT · Built-in L2TP & GRE Tunnelling Client Support · WiFi Mesh Controller mode · Application Firewall Support: IP/URL Filter, MAC filter · DNS, DNS Proxy and DDNS
<p>Data Networking and others Features</p>	<ul style="list-style-type: none"> · DHCP server/client/relay, LAN class A/B/C · LAN Device Access Control · APN · VoIP · Auto/manual network search · Traffic statistics · 802.11e · PMN Lock, Secure boot · Remote Locking
<p>Device Management</p>	<ul style="list-style-type: none"> · WebUI · TR069 via TR-181 Data Model · Firmware upgrade via WEB GUI/TR069 · SSH · CLI, Telnet, HTTP and HTTPS · FTP and HTTP OTA Firmware Upgrade · Bluetooth BLE5.0