

CONNECTING COMMUNITIES THROUGH WIRELESS SOLUTIONS



COMMUNICATION CONPONENTS INC.

FWC-122-25



FWC-122-25



CATEGORY 12 BAND 41 OUTDOOR CPE

Supporting up to 80 MHz bandwidth with carrier aggregation and 256 QAM modulation in downlink, BLiNQ's FWC-122-25 CPE provides a high capacity solution to meet the connectivity needs of a wide variety of users.

Its rugged housing, installation bracket and high IP67 rating also provides peace of mind for deployments in all kinds of tough outdoor environments.



256QAM Downlink



2x2 MIMO with 80 MHz CA Max.



802.3at POE Powered



Supports 1.8V and 3V SIM/USIM





HERE ARE SOME KEY FEATURES:

- Supports TDD-LTE Band 41*
- 3GPP Release 12 Compliant
- Supports up to UE LTE Downlink Category 12/ Uplink Category 13 PHY Rate **
- Supports 4x4 MIMO with 40 MHz CA
 Maximum and DL 2x2 MIMO up to 80 MHz CA
- Supports DL 256QAM with DL 2x2 MIMO only (Contiguous and Non-Contiguous Bandwidth)
- Supports UL 2Tx (CDD / UL_CA/ UL_MIMO)
- Physical 2Tx & 4Rx 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 802.3at POE standard Available on outdoor rated WAN port
- Supports NAT/Tunnel/Bridge/Router Mode
- Supports VPN Pass-Through
- IP67 Environmental Rating
 - * TDD Cat 12 with 4x4 + 40MHz carrier aggregation peak downlink throughput is around 440Mbps @ TDD Config 2 SSF 7 with 64QAM; uplink throughput is around 30Mbps @ 20+20MHz TDD Config 2 SSF 7 with 64QAM
 - ** TDD Cat 13 UL CA +64 QAM is around 30 Mbps ftor uplink.









\sim	\sim	\sim

MECHANICAL, ENVIRONMENTAL & REGULATORY			
	Dimension (L x W x H)	9.8" x 9.8" x 2.2" (250 x 250 x 55mm)	
	Weight	3.5 lbs (1.6 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 Certified	
	Safety	IEC 60950-22:2016, IEC 62368-1:2014 compliant	
	RF Exposure	Meets 47 CFR FCC Part 2.1091	
NETWORKING	NETWORKING & OAM		
	LTE BB ASIC	GDM7243A (GCT Semiconductor)	
	LTE RF ASIC	GRF7243A (GCT Semiconductor)	
	Ethernet LAN Port	1 x RJ-45 Port 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	

FWC-122-25 SPECIFICATIONS





Tunnel Mode	GRE, L2TP, IPsec, PPTP (Available per request)	
DCHP Server in LAN	Yes (For NAT mode, support 253 clients max.)	
DNS Relay	Yes	
DDNS Client	Yes	
VPN Pass-Through - IPSec/PPTP/L2TP	Yes	
UPNP	Yes	
HTTP(s) Server	Yes	
ALG Support (FTP/SIP/)	Yes	
Networking Debug/Testing	IPerf, Ping, Traceroute	
RADIO SPECIFICATION		
Frequency Band	TDD LTE Band 41	
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	
DL Carrier Aggregation Bandwidth	80 MHz max.	
UL Carrier Aggregation Bandwidth	40 MHz max. with 2CC	
UL 2Tx Diversity	26 dBm	
UL 2Tx CA	23 dBm	
UL 2Tx MIMO	23 dBm	
Tx Power Dynamic Range	63 dB	
Receiver Sensitivity (@ 20 MHz)	-96 dBm	
Channel Bandwidth	10, 20 MHz	
	DCHP Server in LAN DNS Relay DDNS Client VPN Pass-Through - IPSec/PPTP/L2TP UPNP HTTP(s) Server ALG Support (FTP/SIP/) Networking Debug/Testing ICATION Frequency Band Peak DL Throughput Peak UL Throughput Carrier Aggregation DL Carrier Aggregation Bandwidth UL Carrier Aggregation Bandwidth UL 2Tx Diversity UL 2Tx CA UL 2Tx MIMO Tx Power Dynamic Range Receiver Sensitivity (@ 20 MHz)	

FWC-122-25 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. 2x2 MIMO with 256 QAM Max.
	UL Modulation	Max. 64 QAM
	LTE Compliance	3GPP Release 12
	Antenna Peak Gain (Single)	12.5 dBi (4 antennas)
DEVICE MANA	GEMENT & 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)

