COMMUNICATION COMPONENTS INC.

BLiNQ
NETWORKS

CONNECTING COMMUNITIES THROUGH

WIRELESS SOLUTIONS

PCW-400

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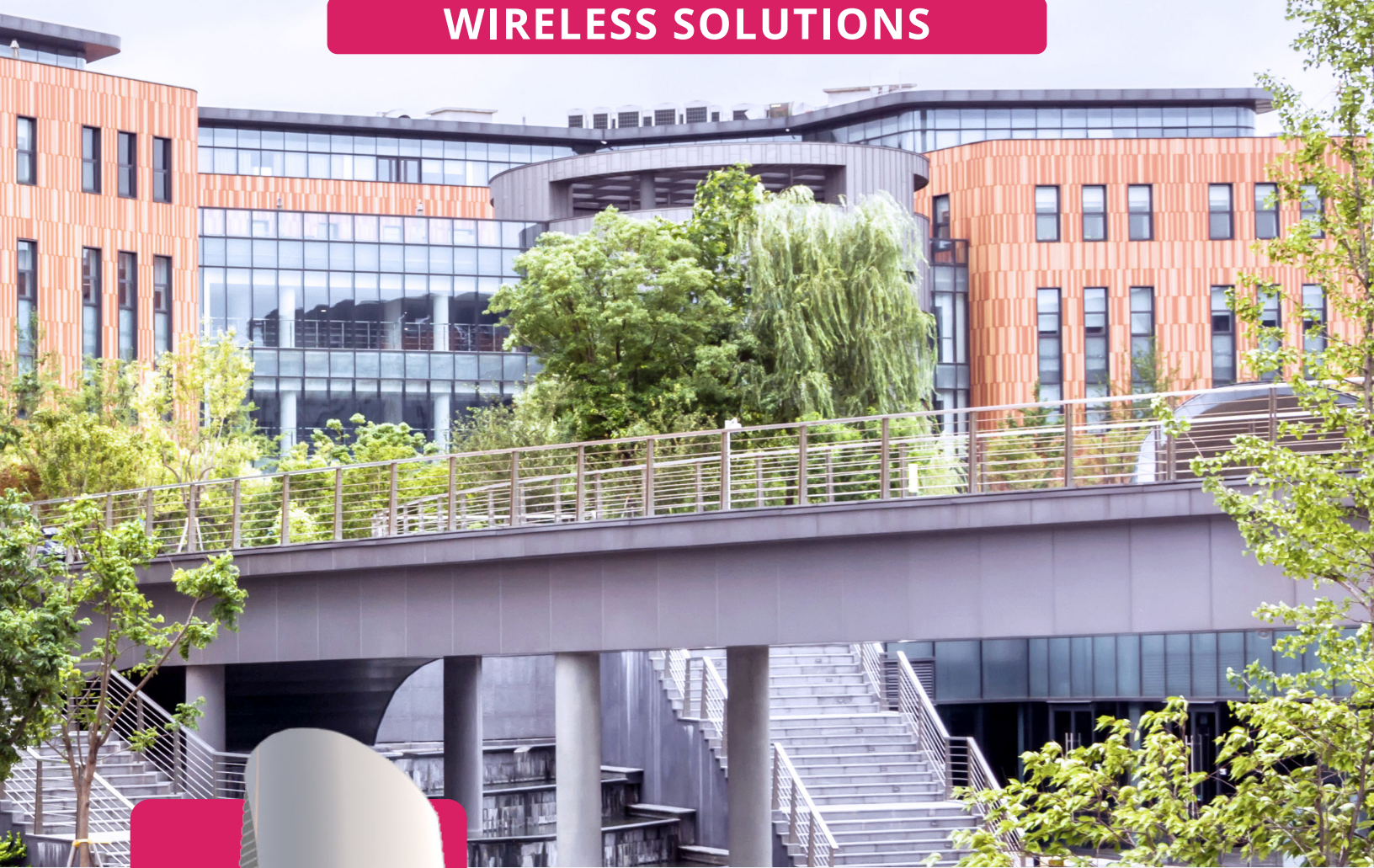
PCW-400

OUTDOOR DUAL INTEGRATED ENTERPRISE 5G SMALL CELL & WI-FI AP

The PCW-400 Wi-Fi enabled 5G outdoor small cell is extremely versatile in its usage and can be deployed in multiple scenarios. Operating as a dual band, dual cell fully integrated gNodeB, the PCW-400 offers unprecedented data capacity and user QoE. This outdoor unit can easily be mounted on lamp posts or buildings for 180° coverage or install two units back-to-back for a comprehensive 360° coverage.

As a 5GNR fully integrated small cell, it operates in n48, n77 and n78 bands*, in addition to the three bands from Wi-Fi 7 standard. Uniquely designed to support simultaneous 5G and Wi-Fi connectivity, the PCW-400 can support up to 128 users at the same time, providing frequency redundancy and interference mitigation. Due to these specs, this product will be ideal for providing 5G coverage extension in any Operator's network, as part of a Neutral Host Network, or in any Private Network deployment scenario.

Managed by BLiNQ's NetLiNQ EMS and SON suite, the PCW-400 can interface with any third-party SMO (Service Management & Orchestration) based on standard O1 (O-RAN) management interfaces. For CBRS band networks, the PCW-400 implements both n48 connectivity options - a stand-alone CBSD agent, as well as connectivity to a SAS PROXY embedded in the NetLiNQ SON software.

BLiNQ's PCW-400 is an extraordinary outdoor gNodeB that can take your network to the next level.

5GNR Dual 2T2R / 4T4R Cell, 200 MHz OBW/IBW

Max. Throughput: 7 Gbps Of Aggregated 5G & Wi-Fi

2T2R Triband Wi-Fi 6E/7 AP

Zero-Touch Provisioning (Automatic Onboarding)

*Other bands available by request

OTHER FEATURES AND BENEFITS:

- **Supports 5G bands n48, n77 and n78**
  This covers 3550-3700 MHz (CBRS),
  3300-4200 MHz and 3300-3800 MHz respectively.

- **180° Coverage**
  Install 2 units back-to-back for a 360° coverage

- **Integrated Antenna**
  Hassle-free, simple deployment

- **Supports Carrier Aggregation**
  Up to 4 CC

- **Supports All 5G FR1 TDD Configurations**
  Applies to both Dual 2T2R and 4T4R

- **Supports VoNR**

- **Supports 1588v2**

- **Supports Mobility**

ADDITIONAL ORDERING OPTIONS:

- **5GNR Only (No Wi-Fi)**
  For lower cost

- **Embedded UPF**
  For low latency use cases

- **Dual RAT (LTE & 5GNR)**
  For 5G NSA networks

- **LTE Only (SW Variant)**
  For 4G LTE Support

5G: 3.x GHz
Wi-Fi: 5.x GHz
Wi-Fi: 6.x GHz

Wi-Fi: 2.4 GHz
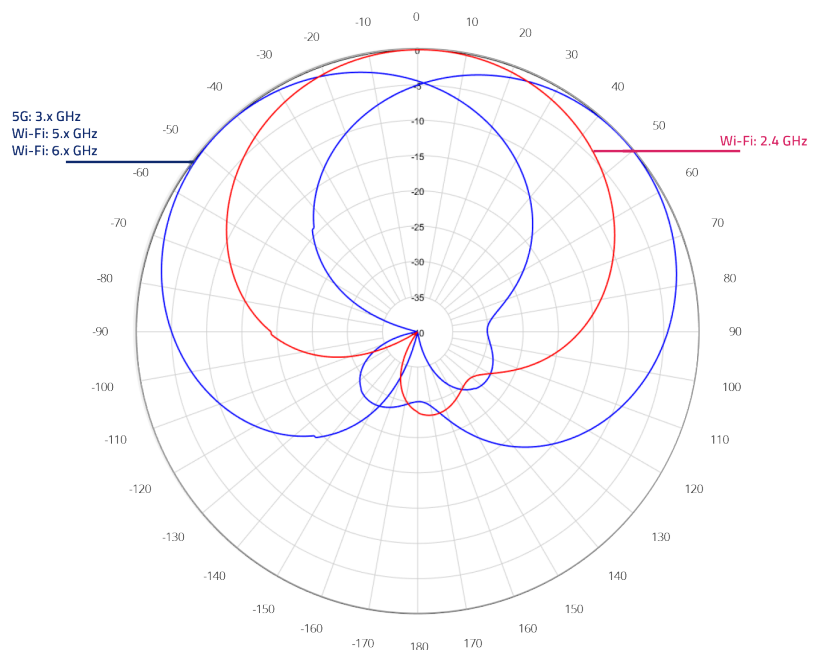
PCW-400
SPECIFICATIONS

RADIO SPECIFICATIONS	
3GPP Compliance	3GPP Rel. 16
5G Frequency Bands	3.3-4.2 GHz (n48/n77/n78)
5G RF	Two 2x2 MIMO 90° Beams (180° Coverage)
5G EIRP	Up to 36 dBm/Stream (TxP: 26 dBm/Stream)
5G Antenna Peak Gain	10 dBi
5G IBW/OBW	200/200 MHz
5G Channel BW	10, 20, 40, 80, 100 MHz
Wi-Fi Standard / Frequency Bands	Wi-Fi 7 (802.11be) / 2.4 GHz, 5.x GHz, 6.x GHz
Wi-Fi 5.x and 6.x GHz RF	Two 2x2 90° Beams (180° Coverage)
Wi-Fi 2.4 GHz RF	2x2 90° Beam (90° Coverage)
Wi-Fi EIRP	36 dBm/Stream (TxP: 23 dBm/Stream)
Wi-Fi Antenna Peak Gain	10 dBi (For all Bands)
Wi-Fi Channel BW	Up to 320 MHz
Wi-Fi Mesh	Easy Mesh, Multi-Link
PERFORMANCE & ATTRIBUTES	
5GNR Radio Standard Support / Quality of Service	5GNR / 3GPP Compliance
5GNR Duplex Mode	TDD
Frame Structure (5ms)	DDDSUUDDDD, DDSSUUDDDD
5G Number of Component Carriers (CC)	Up to 4CC
Max. Modulation	DL: 256 QAM / UL:64 QAM
Aggregated Throughput	Wi-Fi: 4 Gbps 5GNR: 3 Gbps
Power Consumption	70 W
Synchronization	GPS and 1588v2
5G Citizens Broadband Radio Service (CBRS)	CBSD Cat. A
Wi-Fi Automated Frequency Coordination (AFC) Support	Standard Power
Embedded UPF	Optional Hardware SKU
ELECTRICAL & INTERFACES	
Physical Interfaces	10G Ethernet with PoE & 10G SFP+
Power	PoE (IEEE 802.3bt)

SOFTWARE	
Management Protocols	O-RAN based (NETCONF, WebSocket, REST/HTTPS), TR-069, TR-369
Network	IPsec, WireGuard
Core Connectivity	5G Standalone (SA) Optional: 5G Non-Standalone (NSA); 4G LTE
Wi-Fi Security	WPA3-Enterprise, Firewall, Passpoint/Hotspot 2.0
Configuration	Zero-Touch Provisioning (via EMS), CLI
SAFETY AND ENVIRONMENTAL COMPLIANCE	
FCC Title 47 CFR Part 15, Subpart B	Yes
FCC Part 96 Base Station	Yes
UL 62368-1 Safety	Yes
CBRS OnGo Alliance	Yes
ETSI 301 908-14	Yes
ETSI 301 908-1	Yes
ETSI 301 489-50	Yes
ETSI 300 019-1-3	Yes
MECHANICAL	
Dimensions (L x W x D)	21.7" x 10.4" x 5.1" (550 x 265 x 130 mm)
Weight	27.5 lbs (12.5 kg)
Operational Temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Rating	IP65