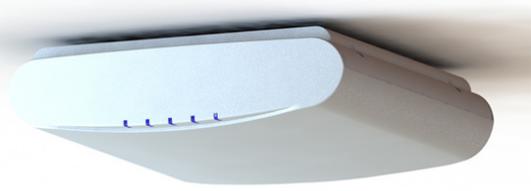


# Q410

## Indoor LTE Access Point for the 3.5GHz CBRS Band



### DATA SHEET



### BENEFITS

#### EASY UPGRADE FROM WIFI

The Ruckus Q410 offers the simplest way to add CBRS capability to your existing WiFi network. Aggregating up to two adjacent CBRS channels, Q410 can offer over 100Mbps of combined throughput to users in high-density areas such as stadiums, hotels and enterprise environments.

#### MULTIPLE APPLICATIONS

From mobile coverage and capacity, to Private LTE and neutral host networks, Q410 covers a broad gamut of CBRS use cases.

#### ADVANCED TECHNOLOGY

Q410 is packed with advanced 3GPP and proprietary technology, such as 20MHz channel bandwidth, Self-Organizing Networks (SON), Self-Organizing Timing and Zero-Touch Provisioning™ that make the solution both extremely powerful as well as easy to deploy.

#### WI-FI -LIKE SIMPLICITY

Q410 is ideal for in-building LTE wireless networks that deploy with the economics and simplicity of Wi-Fi.

#### ATTRACTIVE DESIGN

Q410 looks and feels like a Wi-Fi access point. Its attractive design is ideal for hospitality, education, large office, MTU/MDU, retail, public venues and similar environments. It can even be hidden above ceiling tiles or painted to virtually disappear into the environment.

### OVERVIEW

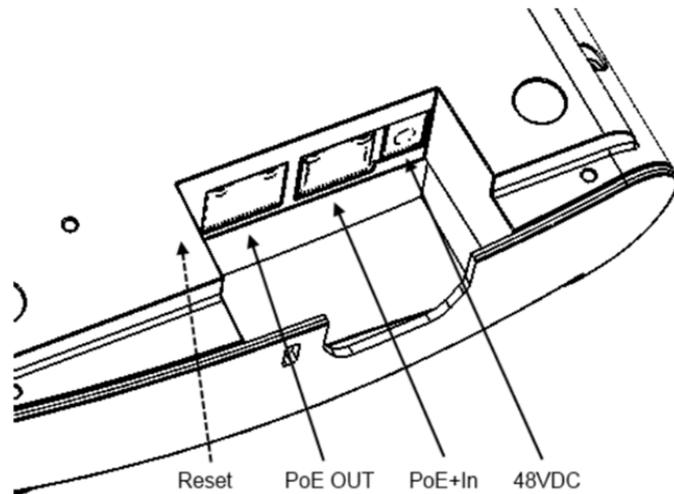
Ruckus Networks, an ARRIS Company, offers a broad portfolio of CBRS-capable LTE access points. Ruckus' LTE access points include indoor, outdoor and plug-ins to existing Ruckus Wi-Fi access points.

The Ruckus Q410 is an indoor, ceiling or wall -mounted LTE Access Point for CBRS. Q410 can be deployed by itself, or plugged in to existing Ruckus WiFi access points such as the R510, R610 and R720 for the ultimate in upgradeability and future-proofing.

### KEY FEATURES AND BENEFITS

- CBRS Alliance OnGo™ Certified for trusted interoperability with all CBRS equipment
- Combines up to 2 available CBRS channels for additional capacity and performance
- CBRS Category A compliant—No professional installation required!
- PoE+ and internal BeamFlex™ antennas for Wi-Fi like deployment simplicity
- Attractive design ideal for public venues and private enterprise environments

### PORT DETAIL



### SPECIFICATIONS

MODEL	Q410
Type	Indoor Plug-in
Technology	3GPP Release 13 TD-LTE Small Cell (eNodeB)
Frequency Band	CBRS B48 (3550-3700 MHz)
Output Power	2 ports at 24dBm per port
MIMO Configuration	Dual 2x2 MIMO
Antennas	2 Internal BeamFlex™ antennas
Max Antenna Gain	2 dBi per antenna
Max EIRP	1/2 W
Max Bandwidth	20 MHz
Bandwidth Configurations (MHz) <sup>1</sup>	10, 20
Max Throughput <sup>1,2</sup>	100 Mbps
Max Simultaneous (RRC Connected) Users <sup>1</sup>	32
Timing Interface	Built-in GPS, IEEE 1588v2 PTP
Data Interface	1Gb Ethernet
Power Input	PoE+ (IEEE 802.3at) or optional 12VDC@2A
Power Output	PoE (IEEE 802.3af) <sup>3</sup>
Networking Protocols	IPv4/IPv6, VLAN, IPSec
Max Power Consumption	13W
EPC Support	Standard 3GPP S1 Interface
SAS Support	WINN Forum TS1.0
EMS Support	Ruckus Cloud LTE
Certifications	OnGo™, FCC Part 96, UL
Physical Ports	2x1GbE RJ-45, 12VDC In
Size (H x W x L)	1.6 x 6.5 x 6.6"
Weight	1.5 lbs
Operating Temperature	0 C (32°F) to +40 C (104°F)
Indicator Lights	<b>PWR:</b> PoE+ or 12VDC on <b>EMS:</b> Connected to Ruckus Cloud LTE <b>EPC:</b> Connected to LTE controller (EPC) <b>SYNC:</b> Timing sync to GPS or IEEE1588 <b>LTE:</b> LTE service active
Box Contents	Q410, mounting bracket, one adapter sleeve each for R510, R610 and R720
Ordering Information <sup>4</sup>	P01-Q410-US01
Optional AC/DC Adapter	902-0180-US00

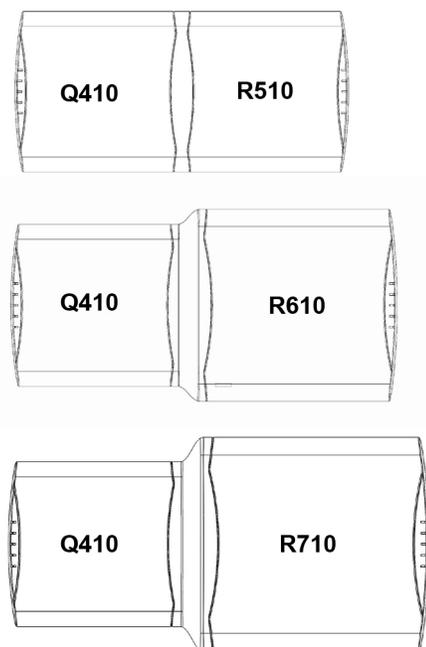
<sup>1</sup> May require future software features

<sup>2</sup> Approximate maximum aggregate application layer uplink and downlink throughput, 2 CBRS channels (20MHz), TDD Config 2, Cat 6 and above UE client

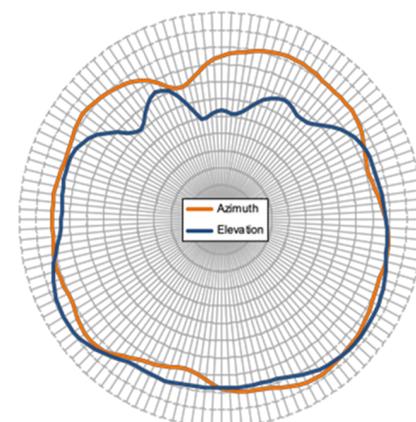
<sup>3</sup> For best performance, it is recommended to have a separate power source and PoE cable for Wi-Fi APs with power requirements that exceed 802.3af, including the R610 and R720.

<sup>4</sup> Requires a CLD-RKSC or CLD-NTWK package.

### OPTIONAL CONFIGURATIONS



### ANTENNA



Q410 Antenna Patterns