

Ruckus C110

Multi-service 802.11ac wall plate cable modem access point



DATA SHEET



BENEFITS

INTEGRATED DOCSIS 3.0 CABLE MODEM

Integrated DOCSIS 3.0 cable modem Featuring an enterprise class wireless access point and an integrated DOCSIS 3 cable modem, the C110 offers Service Providers a simple, cost effective, and easy to manage solution for SMB hotspot deployments.

ADDITIVE PERFORMANCE WITH BEAMFLEX+

BeamFlex+ adaptive antennas improve Wi-Fi signal quality by adapting to device location and orientation, which is ideal for better performance on handheld mobile devices.

802.11AC WAVE 2 MU-MIMO

MU-MIMO improves network performance with efficient airtime utilization to benefit both Wave 2 and non-Wave 2 clients.

CONVERGED IP SERVICES

Multiple SSIDs, port-based VLANs and robust authentication options make the ZoneFlex C110 ideal for supporting concurrent IP-based services such as VoIP, IPTV, high-speed Internet access and in-room device connectivity — both wired and wireless.

CHANNEL SELECTION OPTIMIZES THROUGHPUT

ChannelFly channel selection, based on throughput measurements, not just interference, chooses the best channel to give users the highest possible throughput.

STANDALONE OR CENTRALLY MANAGED

The C110 can be deployed in standalone mode or centrally managed by the Ruckus ZoneDirector or SmartZone controllers.

SLEEK AND COMPACT FORM FACTOR

Installs into any standard electrical outlet box, creating a low profile, secure design with front port access to eliminate unsightly cabling and disruptive furniture placement.

Ruckus C110

HIGH PERFORMANCE 802.11AC WAVE 2 INTEGRATED WIRED/WIRELESS WALL SWITCH WITH DOCSIS 3.0 CONNECTIVITY

The Ruckus C110 is an unprecedented, highly-integrated cable modem access point designed to deliver best-in-class Wi-Fi connectivity over building-scale DOCSIS infrastructure. The C110 features a two-spatial-stream 802.11ac Wave 2 capable access point, integrated Ethernet switch, and DOCSIS 3.0 cable modem, all in a sleek, low-profile wall plate form factor that can be discretely installed over a standard electrical junction box.

The C110 has been engineered from the ground up to provide a single box solution specifically to support Wi-Fi deployments in buildings with pre-existing coaxial cabling. Ideally suited for hotels, multi-dwelling-units (MDUs), and student residences where the cost of pulling new data cabling otherwise prohibits Wi-Fi installation, the C110's integrated DOCSIS 3.0 cable modem provides reliable Wi-Fi backhaul over existing coaxial cabling to an in-building or off-premise CMTS.

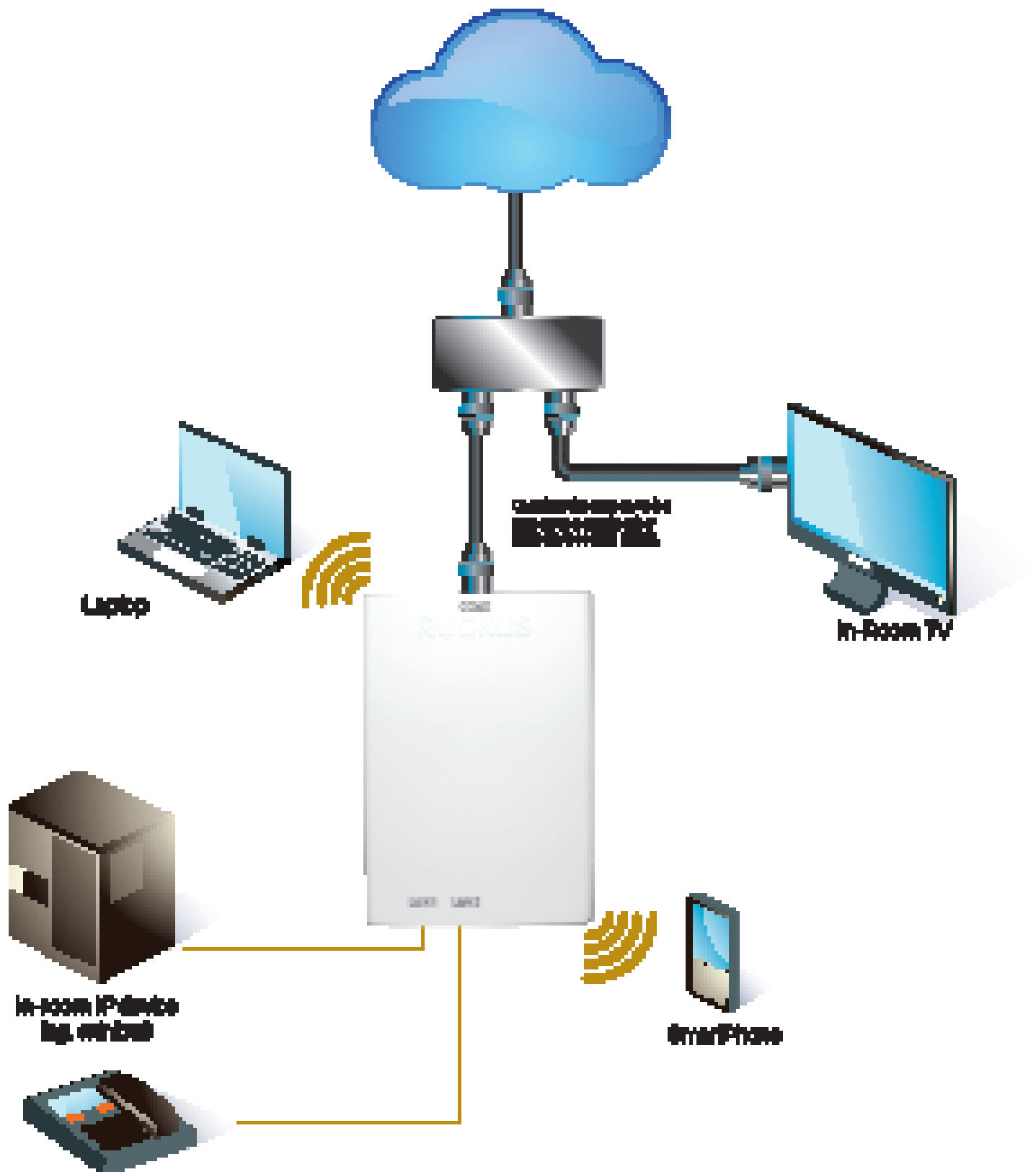
A dual-band wireless access point with 802.11ac Wave 2 Multi-User MIMO (MU-MIMO) support, the C110 delivers outstanding Wi-Fi performance. Efficient airtime utilization due to MU-MIMO boosts performance for Wave 2 clients while also freeing up airtime for non-Wave 2 clients, which means all clients enjoy a performance benefit.

The "mobile device ready" C110 features Ruckus patented BeamFlex+ smart antennas, which adapt in real time to client device location and physical orientation, delivering consistent and reliable Wi-Fi performance. The BeamFlex+ adaptive antenna system of the C110 is optimized for coverage in hotel guest rooms and MDU residences.

Equipped with two Ethernet ports for in-room access, the C110 can be used to connect a range of wired network devices such as: IPTV set-top boxes and VoIP telephones, while simultaneously providing dual band 802.11ac wireless LAN connectivity. The C110 is powered via a 12V DC power adapter via a discrete and secure connection. Cable channels on the back of the C110 provide added installation flexibility and preserve access to legacy behind-wall cabling.

The C110 can be deployed as a standalone device or centrally managed by Ruckus SmartZone or ZoneDirector controller platforms.

CONVERGED WIRED AND WIRELESS SERVICES



PHYSICAL CHARACTERISTICS	
Power	<ul style="list-style-type: none"> DC Input: 12VDC 2.0A
Physical Size	<ul style="list-style-type: none"> 180mm x 150mm x 35mm
Weight	<ul style="list-style-type: none"> 386 g (13.62 oz)
Data Ports Docsis/Euro Docsis	<ul style="list-style-type: none"> 2 auto MDX, auto-sensing 10/100 Mbps, RJ-45 port DOCSIS/Euro DOCSIS 3.0 8x4 modem port, type F connector USB 2.0
Mounting Options	<ul style="list-style-type: none"> Electrical wallbox; Standard US and EU single gang wall jack Optional bracket for offset & wall mount
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: 0°C - 40°C Operating Humidity: 5% - 95% non-condensing
Power Draw	<ul style="list-style-type: none"> Idle: 8.5W Typical: 11.1W Peak: 17.2W

RF	
Antenna	<ul style="list-style-type: none"> BeamFlex+ adaptive antennas with polarization diversity
BeamFlex* Sinr Tx Gain	<ul style="list-style-type: none"> Up to 2dB
BeamFlex* Sinr Rx Gain	<ul style="list-style-type: none"> 3-5dB (PD-MRC)
Interference Mitigation	<ul style="list-style-type: none"> 5dB
Minimum Rx Sensitivity	<ul style="list-style-type: none"> -96/-95dBm

* BeamFlex gains are statistical system level effects translated to enhanced SINR based on observations over time in real-world conditions with multiple APs and many clients

MANAGEMENT	
Deployment Options	<ul style="list-style-type: none"> Standalone Managed by ZoneDirector Managed by SmartZone
Configuration	<ul style="list-style-type: none"> Web User Interface (HTTP/S) CLI (Telnet/SSH), SNMP v1, 2, 3
Auto Ap Software Updates	<ul style="list-style-type: none"> FTP or TFTP

CABLE MODEM	
DOCSIS version	<ul style="list-style-type: none"> 1.0/1.1/2.0/3.0 compliant and certified
Channel Bonding	<ul style="list-style-type: none"> Supports 8 downstream channels and 4 upstream channels
Support and management	<ul style="list-style-type: none"> Embedded diagnostics web interface Status LED's SNMP management

WI-FI	
STANDARDS	<ul style="list-style-type: none"> IEEE 802.11a/b/g/n/ac 2.4GHz and 5GHz

WI-FI	
SUPPORTED DATA RATES	<ul style="list-style-type: none"> 802.11n/ac: 6.5Mbps - 173.4Mbps (20MHz) 13.5Mbps - 400Mbps (40MHz) 29.3Mbps - 867Mbps (80MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6Mbps 802.11b: 11, 5.5, 2 and 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps
RADIO CHAINS	<ul style="list-style-type: none"> 2 x 2
SPATIAL STREAMS	<ul style="list-style-type: none"> 2
RF POWER OUTPUT (Aggregate)	<ul style="list-style-type: none"> 19 dBm for 2.4GHz† 22 dBm for 5GHz†
CHANNELIZATION	<ul style="list-style-type: none"> 20MHz, 40MHz, 80MHz
FREQUENCY BAND	<ul style="list-style-type: none"> IEEE 802.11 b/g/n: 2.4 - 2.484GHz IEEE 802.11a/ac: 5.15 - 5.25 GHz; 5.25 - 5.35GHz; 5.47 - 5.725GHz; 5.725 - 5.85GHz
OPERATING CHANNELS	<ul style="list-style-type: none"> US/Canada: 1-11, Europe (ETSI X30): 1-13 5 GHz channels: Country dependent
POWER SAVE	<ul style="list-style-type: none"> Supported
WIRELESS SECURITY	<ul style="list-style-type: none"> WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i Authentication via 802.1X, local authentication database, support for RADIUS, LDAP, and ActiveDirectory

† Maximum power varies by country
*See price list for latest country certification listing

CAPACITY	
CONCURRENT STATIONS	<ul style="list-style-type: none"> 100 clients per AP
SIMULTANEOUS VoIP CLIENTS	<ul style="list-style-type: none"> 30

PRODUCT ORDERING INFORMATION

This product can only be ordered through qualified partners.

MODEL	DESCRIPTION
Ruckus C110 Smart Wi-Fi 802.11ac Access Point with integrated DOCSIS 3.0 cable modem	
901- C110- US00	C110, 802.11ac, 2x2:2, Dual Band Concurrent (2.4/5GHz) wall plate AP/CM, DOCSIS, North America power supply
901- C110- EU01	C110, 802.11ac, 2x2:2, Dual Band Concurrent (2.4/5GHz) wall plate AP/CM, EuroDOCSIS, EU power supply
901- C110- UN00	C110, 802.11ac, 2x2:2, Dual Band Concurrent (2.4/5GHz) wall plate AP/CM, DOCSIS, North America power supply
901- C110- UK01	C110, 802.11ac, 2x2:2, Dual Band Concurrent (2.4/5GHz) Wall Plate AP/CM, EuroDOCSIS, UK power supply
Optional Accessories	
902-0124-0000	<ul style="list-style-type: none"> Accessory Offset Mounting Bracket

Warranty: Sold with a limited lifetime warranty.
For details see: <http://support.ruckuswireless.com/warranty>