

DATA SHEET



BENEFITS

NO CAT 5 NEEDED

Deliver great in-room Wi-Fi and concurrent wired IP connectivity using an integral DOCSIS 3.0 cable modem for backhaul over coaxial cable

GREAT ALL-IN-ONE

Combines the best of Wi-Fi with 802.11ac Wave 2 and a switch with two 100Mbps ports into one wall-mounted unit.

STUNNING WI-FI PERFORMANCE

Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing multi-directional antenna patterns.

GET OPTIMAL THROUGHPUT

ChannelFly dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support

SERVE MORE DEVICES

Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing non-Wave 2 device performance.

SUPPORT MORE SERVICES

Multiple SSIDs and switch ports help support services such as VoIP, IPTV, and high-speed Internet access and in-room device connectivity.

MORE THAN WI-FI

Enhance your network with Cloudpath security and management software, SPoT real-time Wi-Fi location engine and analytics software, and SCI network analytics.

In hotels and housing structures, residents and guests have sky-high expectations for their in-room connectivity options. The technology experience—the quality of available high-speed wired and wireless Internet, voice, and TV services—is becoming a central factor in which hotels people choose for both business and leisure. When weighing options for long-term housing, poor-quality wired and wireless services can cause prospective residents to disqualify a property altogether.

The Ruckus C110 delivers a modern, in-room wall-mount solution that is fast and easy to install, using existing in-building or off-premises Cable Modem Termination Systems (CMTS). The C110 combines the industry's highest-performing 802.11ac Wave 2 wireless access point with a DOCSIS 3.0 cable modem and Ethernet switch.

The C110 is the perfect choice for hotels, student residence halls, and multi-dwelling unit (MDU) properties that depend on coaxial cable to deliver high-speed Internet. Equipped with two Ethernet ports, it can connect IPTV set-top, VoIP telephones, and other wired devices. At the same time, the C110 delivers great 802.11ac wireless performance with advanced features such as guest access and Hotspot 2.0.

The C110 802.11ac Wave 2 Wi-Fi AP and switch incorporates patented technologies found only in the Ruckus Wi-Fi portfolio.

- Extended coverage with patented BeamFlex+ utilizing multi-directional antenna patterns.
- Improve throughput with ChannelFly, which dynamically finds less congested Wi-Fi channels to use.

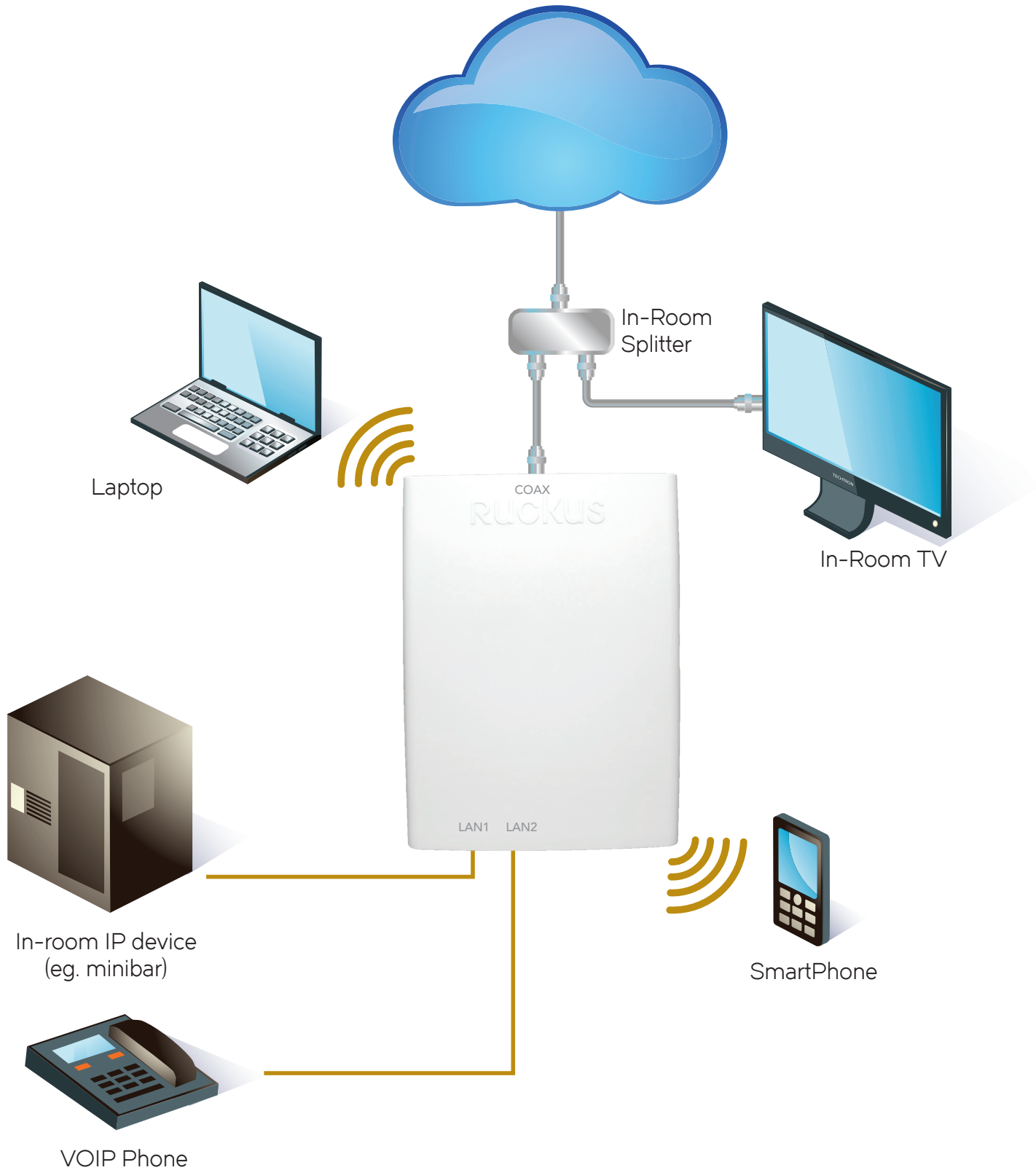
The C110 also provides next-generation 802.11ac features like MultiUser MIMO (MU-MIMO) connectivity. It can simultaneously transmit to multiple client devices, drastically improving spectral efficiency, overall throughput for all users—even those with non-Wave 2 clients. Additionally, it features a USB port for hosting Internet of Things (IoT) devices such as Bluetooth Low Energy (BLE), and support for smart mesh networking to minimize the need for extra cabling.

Whether you're deploying ten or ten thousand APs, the C110 is easy to manage through Ruckus' appliance, virtual and cloud management options.

NOTE: The C110 is available only through approved DOCSIS Ruckus Partners, as its installation requires specialized knowledge of cable modems and CMTS equipment. For more details, please contact your local Ruckus sales team.



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
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 Active-Directory

* 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
The C110 Wi-Fi Wave 2 802.11ac 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>