

# Using Existing Coax Cable to Support Modern Hotel Wi-Fi



## SOLUTION BRIEF



### THE CHALLENGE

Everyone in the hospitality industry understands the importance of providing great Wi-Fi to hotel guests. 90% of business travelers expect high speed Wi-Fi and over 60% pick their hotel based on past Wi-Fi experiences. However, many of today's hotel Wi-Fi networks do not have sufficient performance to keep up with user demands and therefore, must be upgraded to the latest technology. In a perfect world, there is Ethernet abundantly available throughout the hotel to provide the connection to the Wi-Fi network. Ethernet is the gold standard infrastructure since it is both widely understood and is capable of ample bandwidth. However, 80% of existing hotel rooms in the US do not have Ethernet available and in many situations, it's not viable to re-cable the hotel since:

- the cost of running new Ethernet throughout the hotel is too high due to the size of the hotel or the overall structure of the hotel.
- re-cabling can take significant time and takes guest rooms and other parts of the hotel out-of-service, resulting in a loss of revenue.

In these situations, there is still a great alternative to Ethernet with existing coax cabling which is available in virtually every hotel room. Wi-Fi networks running over Coax using DOCSIS (Data Over Cable Service Interface Specification) provides a great upgrade path for hotels that is cost effective, fast to deploy and provides a huge bandwidth improvement to support today's guests.

### THE SOLUTION

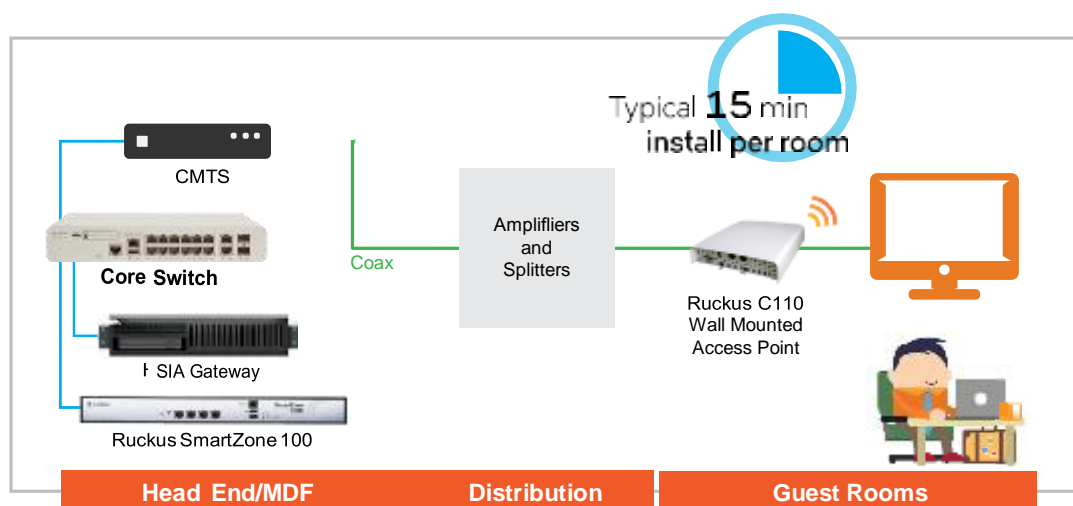
Coax cable is abundant in hotels since it is the primary cabling that supplies cable TV to every room and throughout the hotel. DOCSIS 3.0, the latest standard is designed to deliver ultra-fast, broadband Internet over existing coaxial infrastructure.

Ruckus is the leading provider of in-room wall plate access points and has purposely built the C110 in-room access point for situations where hotel networks need upgraded but Ethernet is not available. The C110 comes equipped with a built-in DOCSIS compliant modem so the same coax cable that is carrying video signals to now be utilized for Internet traffic, simultaneously. And since DOCSIS is built for today's hotel guests, it provides the speed hotel guests need and expect. For hoteliers, this means that DOCSIS and the Ruckus C110 allows hotels to improve the guest Wi-Fi experience without tearing apart walls or taking rooms out of service resulting in a viable alternative to Ethernet.

When does it make sense for hotels to consider a DOCSIS solution?

- Large hotels where re-cabling is too costly
- High-occupancy hotels where taking the hotel room out-of-service for any length of time results in significant revenue loss
- Older hotel properties equipped with concrete walls, asbestos, reinforced wall structures or other obstacles which make running Ethernet throughout the hotel very challenging, time consuming and costly
- Historic hotels where re-cabling might impact the aesthetics of the hotel or may not even be a viable option due to restrictions.

Ruckus created the C110 wall mounted access point with built-in cable modem as a way to solve this challenge for hotels. The Ruckus C110 includes all the great technology Ruckus is known for and is an excellent solution for these environments. The C110 features the latest in Wi-Fi radio technology with 802.11ac Wave 2 along with the patented Beamflex antenna technology for the most efficient and highest performing access points in the industry.



The C110 enables hotels to easily and cost effectively upgrade their existing guest experience with the latest in Wi-Fi technology by providing:

- High speed Internet access over the hotel's existing coax cabling
- Tiered Wi-Fi guest experience along with IPTV, VoIP and other critical guest services
- Fast installations that require little room down-time

### BENEFITS

- Excellent solution for non-Ethernet equipped hotels
- Ability to upgrade the hotel Wi-Fi to the latest technology without costly re-cabling the entire hotel
- Paves the way for both IPTV and VoIP
- Support the full suite of guest services in one wall plate
- Upgrade any hotel rooms with no out-of-service time
- Upgrade to the latest Wi-Fi technology 802.11ac Wave 2 for the performance hotel guests require
- Introduces Ethernet to every room with two 10/100 Ethernet ports in each C110 wall mounted access point
- IoT support through USB to enable additional services/ solutions

### SUMMARY

The C110 wall mounted access point is a feasible solution for any hotel property with coax cable. In conditions where Ethernet is not available, the C110 provides an easy upgrade path to today's Wi-Fi technology, including 802.11ac Wave 2, supporting high-speed Internet access, IPTV and VoIP services. The solution allows hotels to provide an excellent Wi-Fi guest experience without the cost and time associated with re-cabling the hotel with Ethernet. Guests will love the latest Wi-Fi technology, translating to higher guest satisfaction.