



# The WhyReboot Difference

WhyReboot specializes in creating commercial-grade networks that address the demands of advanced control and automation technologies in connected residential, commercial and luxury marine environments. WhyReboot network systems are highly scalable and customized for each application using the finest components available.

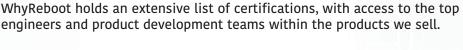
# What that means for you:



A reliable network is the key to making the technology in your home or commercial environment work properly. WhyReboot's has outstanding reliability in its design and products.



We only use the best products available, to ensure 24/7 uptime, reliability, and performance.





We offer lifetime warranty on all our indoor gear provided it's not end of life from the manufacturer.



We literally wrote the book on networking having authored and co-authored three of CEDIA's Advanced Networking courses, the certification exams, the Advanced Residential Electronics Systems book now taught at college campuses across the country, and the upcoming ISO/ANSI accredited Residential Network Specialist accreditation.

WhyReboot technicians are certified experts, and our partnerships give us access to a wealth of knowledge and resources.



# Benefits

### **Connect More Devices Simultaneously**

Improve device performance, by enabling more simultaneous device connections with built-in 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology.

### **Ultra-High-Density Performance**

Provides exceptional end-user experience within stadiums, large public venues, convention centers and school auditoriums with the RUCKUS Ultra-High-Density Technology Suite.

## **Enhanced Security**

Supports the latest Wi-Fi security standard, WPA3, for enhanced protection from man-in-the-middle attacks in the most secure way.

### **Multi-Gigabit Access Speeds**

Optimized multi-gigabit Wi-Fi performance delivered using built-in 5GbE/2.5GbE Ethernet ports to connect to multi-gigabit switches.

# **Device Management Options**

Manage the R850 with cloud, on premise physical/virtual appliances and control auto-provisioning for faster deployment and seamless firmware upgrades.

### **Better Mesh Networking**

Minimize complexity by reducing expensive cabling with SmartMesh that dynamically creates self-forming, selfhealing mesh networks.

# **Converged Access Point**

Eliminate siloed wireless networks with a unified platform that augments Wi-Fi with onboard BLE & Zigbee radios with the option to integrate other wireless technologies via the USB port.

# More Than Wi-Fi

Support services beyond Wi-Fi with RUCKUS IoT Suite, Cloudpath security and onboarding software, SPoTWi-Fi locationing engine, and RUCKUS analytics.

# RUCKUS Networks R850 Indoor Access Point

Indoor Wi-Fi 6 8x8:8 Access Point with 5.9 GbpsData Rate

The RUCKUS R850 is based on the latest Wi-Fi standard, Wi-Fi 6, which bridges the performance gap from 'gigabit' Wi-Fi to 'multi-gigabit' Wi-Fi in support of the insatiable demand for better and faster Wi-Fi.

The RUCKUS R850 is our highest capacity dual-band, dual-concurrent Wi-Fi 6access point (AP) that supports 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz). The R850, with OFDMA, TWT and MU-MIMO capabilities, efficiently manages up to 1,024 client connections with increased capacity, improved coverage and performance in ultra-high dense environments. Furthermore, a 5 Gbps multi-gigabit Ethernet port mitigates back haul capacity bottlenecks.

Additionally, the R850 is IoT- and LTE-ready, and supports wireless standards beyond Wi-Fi in combination with the RUCKUS IoT Suite and our CBRS/OpenG modules.

The R850 addresses the increasing client demands in transit hubs, auditoriums, stadiums, conference centers, and other highly trafficked indoor spaces. It is the perfect choice for dataintensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-of-service requirements.

The R850 when paired with the RUCKUS Ultra-High-Density Technology Suite found only in the RUCKUS Wi-Fi portfolio, dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime Decongestion: Increases average network throughput in heavily congested environments
- Transient Client Management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns

Whether you're deploying ten or ten thousand APs, the R850 is also easy to manage through our collection of on-premises or cloud-based management options.

# RUCKUS Networks R850 Indoor Access Point

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# Benefits

### **Connect More Devices Simultaneously**

Improve device performance, by enabling more simultaneous device connections with built-in 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology.

# **Ultra-High-Density Performance**

Provides exceptional end-user experience within stadiums, large public venues, convention centers and school auditoriums with the RUCKUS Ultra-High-Density Technology Suite.

## **Enhanced Security**

Supports the latest Wi-Fi security standard, WPA3, for enhanced protection from man-in-the-middle attacks in the most secure way.

### **Multi-Gigabit Access Speeds**

Optimized multi-gigabit Wi-Fi performance delivered using built-in 5GbE/2.5GbE Ethernet ports to connect to multi-gigabit switches.

# **Device Management Options**

Manage the R850 with cloud, on premise physical/virtual appliances and control auto-provisioning for faster deployment and seamless firmware upgrades.

### **Better Mesh Networking**

Minimize complexity by reducing expensive cabling with SmartMesh that dynamically creates self-forming, selfhealing mesh networks.

# **Converged Access Point**

Eliminate siloed wireless networks with a unified platform that augments Wi-Fi with onboard BLE & Zigbee radios with the option to integrate other wireless technologies via the USB port.

# More Than Wi-Fi

Support services beyond Wi-Fi with RUCKUS IOT Suite, Cloudpath security and onboarding software, SPoTWi-Fi locationing engine, and RUCKUS analytics.

# RUCKUS Networks R750 Indoor Access Point

Indoor Wi-Fi 6 (802.11ax) Access Point for Ultra-Dense Environments

The RUCKUS® R750 is based on the latest Wi-Fi 6 standard and bridges the performance gap from 'gigabit' Wi-Fi to 'multi-gigabit' Wi-Fi in support of the insatiable demand for better and faster Wi-Fi. The R750 is the first Wi-Fi 6 AP to be certified by Wi-Fi Alliance as Wi-Fi CERTIFIED 6. As part of the Wi-Fi Alliance testbed, the R750 validates other devices for Wi-Fi CERTIFIED 6 interoperability.

The RUCKUS R750 is our high-end dual-band, dual-concurrent Wi-Fi 6 AP that supports 8 spatial streams (4x4:4 in 5GHz, 4x4:4 in 2.4GHz). The R750, with OFDMA and MU-MIMO capabilities, efficiently manages up to 1024 client connections with increased capacity, improved coverage and performance in ultra-high dense environments.

The R750, with OFDMA, TWT and MU-MIMO capabilities, efficiently manages up to 1024 client connections with increased capacity, improved coverage and performance in ultra-dense environments. Furthermore, multi-gigabit Ethernet ensures the backhaul is not a bottleneck for full use of available Wi-Fi capacity.

Also, wireless requirements within enterprises are expanding beyond Wi-Fi with BLE, Zigbee and many other non-Wi-Fi wireless technologies. Enterprises need a unified platform to eliminate network silos. The RUCKUS AP portfolio is equipped to solve these challenges through wireless convergence.

The R750 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the R750 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with our USB port.

The R750 addresses the increasing client demands in transit hubs, auditoriums, conference centers, and other high traffic indoor spaces. It is the perfect choice for data-intensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-of-service requirements. The R750 is also easy to manage through RUCKUS physical and virtual cloud management options.

The R750 when paired with the RUCKUS Ultra-High-Density Technology Suite found only in the RUCKUS Wi-Fi portfolio, dramatically improves network performancethrough a combination of patented wireless innovations and learning algorithmsthat includes:dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime Decongestion: Increases average network throughput in heavily congested environments
- Transient Client Management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns

Whether you are deploying ten or ten thousand APs, the R750 is also easy to manage through RUCKUS' physical and virtual management options.





# **Connect More Devices Simultaneously**

Improve device performance, by enabling more simultaneous device connections with built-in 8 spatial streams (4x4:4 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology.

### **High-Density Performance**

Provides exceptional end-user experience within large meeting halls, general enterprise spaces, and large classrooms with the RUCKUS Ultra-High-Density Technology Suite.

### **Converged Access Point**

Allows customers to eliminate siloed networks and unify WiFi and non-WiFi wireless technologies into one single network by using built-in BLE and Zigbee, and also expanding to any future wireless technologies through the USB port.

### Multi-Gigabit Access Speeds

Optimized multi-gigabit Wi-Fi performance delivered using built-in 2.5GbE port to connect to multigigabit switches.

# Multiple management options

Manage the R750 with on premise physical/ virtual appliances and control auto-provisioning for faster deployment and seamless firmware upgrades.

# **Enhanced Security**

The latest Wi-Fi security standard with WPA3 and receive enhanced protection from man-in-the-middle attacks in the most secure way.

### More Than Wi-Fi

Support services beyond Wi-Fi with RUCKUS IoT Suite, Cloudpath® security and onboarding software, SPoTWi-Fi locationing engine, and RUCKUS analytics.



# **Connect More Devices Simultaneously**

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# **RUCKUS Networks R750 Indoor Access Point**

Indoor Wi-Fi 6 (802.11ax) Access Point for Ultra-Dense Environments

The RUCKUS® R750 is based on the latest Wi-Fi 6 standard and bridges the performance gap from 'gigabit' Wi-Fi to 'multi-gigabit' Wi-Fi in support of the insatiable demand for better and faster Wi-Fi. The R750 is the first Wi-Fi 6 AP to be certified by Wi-Fi Alliance as Wi-Fi CERTIFIED 6. As part of the Wi-Fi Alliance testbed, the R750 validates other devices for Wi-Fi CERTIFIED 6 interoperability.

The RUCKUS R750 is our high-end dual-band, dual-concurrent Wi-Fi 6 AP that supports 8 spatial streams (4x4:4 in 5GHz, 4x4:4 in 2.4GHz). The R750, with OFDMA and MU-MIMO capabilities, efficiently manages up to 1024 client connections with increased capacity, improved coverage and performance in ultra-high dense

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Also, wireless requirements within enterprises are expanding beyond Wi-Fi with BLE, Zigbee and many other non-Wi-Fi wireless technologies. Enterprises need a unified platform to eliminate network silos. The RUCKUS AP portfolio is equipped to solve these challenges through wireless convergence.

The R750 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the R750 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with our USB port.

The R750 addresses the increasing client demands in transit hubs, auditoriums, conference centers, and other high traffic indoor spaces. It is the perfect choice for data-intensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-of-service requirements. The R750 is also easy to manage through RUCKUS physical and virtual cloud management options.

The R750 when paired with the RUCKUS Ultra-High-Density Technology Suite found only in the RUCKUS Wi-Fi portfolio, dramatically improves network performancethrough a combination of patented wireless innovations and learning algorithmsthat includes:dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime Decongestion: Increases average network throughput in heavily congested environments
- Transient Client Management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns





# **Benefits**

# Stunning Wi-Fi performance

Mitigate interference and extend coverage with patented BeamFlex+ adaptive antenna technology utilizing several directional antenna patterns.

### Serve more devices

Connect more devices simultaneously with four MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing device performance.

### **Converged Access Point**

Allows customers to eliminate siloed networks and unify Wi-Fi and non-Wi-Fi wireless technologies into one single network by using built-in BLE and Zigbee, and also expand to any future wireless technologies through the USB port.

# Automate 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.

# Multiple management options

Manage the R650 from the cloud, with on-premises physical/virtual appliances, or without a controller.

### Better mesh networking

Reduce expensive cabling, and complex mesh configurations by checking a box with SmartMesh wireless meshing technology to dynamically create self-forming, self-healing mesh networks.

# More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and RUCKUS analytics.



# RUCKUS Networks R650 Indoor Access Point

Indoor Wi-Fi 6 (802.11ax) 4x4:4 Wi-Fi Access Point with 2.5Gbps backhaul and 6 spatial streams

Wi-Fi capacity requirements in office buildings, classrooms, and retail venues are rapidly raising due to increase in Wi-Fi connected devices, non-Wi-Fi IoT devices and bandwidth-hungry applications.

The RUCKUS R650 access point (AP) with the latest Wi-Fi 6 (802.11 ax) technology delivers increased capacity, improved coverage and performance in dense environments. The R650 is our mid-range dualband, dual-concurrent AP that supports six spatial streams (4x4:4 in 5GHz, 2x2:2 in 2.4GHz). The R650 supports peak data rates of up to 2974 Mbps and efficiently manages up to 512 clients connections. Furthermore, 2.5GbE Ethernet ensures the backhaul will not be a bottleneck for full use of available Wi-Fi capacity.

Also, wireless requirements within enterprises are expanding beyond Wi-Fi with BLE, Zigbee and many other non-Wi-Fi wireless technologies resulting in creation of network silos. Enterprises need a unified platform to eliminate network silos. The Ruckus AP portfolio is equipped to solve these challenges.

The R650 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the R650 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with the pluggable IoT module.

The R650 is packed with ruckus patented technologies in addition to Wi-Fi 6 features such as OFDMA, MU-MIMO and TWT. The R650 is ideal for medium-density deployments such as office buildings, K-12 classrooms, libraries and retail venues.

The R650 Wi-Fi 6 AP incorporates patented technologies found only in the Ruckus Wi-Fi portfolio.

- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns
- ChannelFly: Improved throughput with dynamically changing the channels to use least congested channel
- Ruckus Ultra-High-Density Technology Suite: Dramatically improved network performance with technologies such as Airtime Decongestion, Transient Client Management etc.

Whether you're deploying ten or ten thousand APs, the R650 is also easy to manage through Ruckus' physical and virtual management options.

# RUCKUS Networks R650 Indoor Access Point

Indoor Wi-Fi 6 (802.11ax) 4x4:4 Wi-Fi Access Point with 2.5Gbps backhaul and 6 spatial streams

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Whether you're deploying ten or ten thousand APs, the R650 is also easy to manage through Ruckus' physical and virtual management options.



# **Benefits**

# Stunning Wi-Fi performance

Mitigate interference and extend coverage with patented BeamFlex+ adaptive antenna technology utilizing several directional antenna patterns.

### Serve more devices

Connect more devices simultaneously with four MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing device performance.

### **Converged Access Point**

Allows customers to eliminate siloed networks and unify Wi-Fi and non-Wi-Fi wireless technologies into one single network by using built-in BLE and Zigbee, and also expand to any future wireless technologies through the USB port.

# Automate 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.

# Multiple management options

Manage the R650 from the cloud, with on-premises physical/virtual appliances, or without a controller.

### Better mesh networking

Reduce expensive cabling, and complex mesh configurations by checking a box with SmartMesh wireless meshing technology to dynamically create self-forming, self-healing mesh networks.

# More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and RUCKUS analytics.





# RUCKUS Networks R550 Indoor Access Point

Wi-Fi capacity requirements in classrooms, office spaces, and medium-size venues are rising due to the increase in the number of Wi-Fi connected devices.

# Stunning Wi-Fi performance

Mitigate interference and extend coverage with patented BeamFlex + adaptive antenna technology utilizing several directional antenna patterns.

### Serve more devices

Connect more devices simultaneously with four MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing device performance.

### **Converged Access Point**

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# Better mesh networking

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# More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPOT Wi-Fi locationing engine, and RUCKUS analytics. An increase in bandwidth requirements for applications and an ever-growing assortment of IoT devices puts further strain on already stretched Wi-Fi networks.

The RUCKUS R550 access point (AP) with the latest Wi-Fi 6 (802.11 ax) technology delivers the ideal combination of increased capacity, improved coverage and affordability in dense environments. The R550 is our mid-range dual-band, dual-concurrent AP that supports four spatial streams (2x2:2 in 2.4GHz/5GHz). The R550 supports peak data rates of up to 1774 Mbps and efficiently manages up to 512 clients connections.

Also, wireless requirements within enterprises are expanding beyond Wi-Fi with BLE, Zigbee and many other non-Wi-Fi wireless technologies resulting in creation of network silos. Enterprises need a unified platform to eliminate network silos. The RUCKUS AP portfolio is equipped to solve these challenges.

The R550 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the R550 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with the pluggable IoT module.

The R550 is packed with ruckus patented technologies in addition to Wi-Fi 6 features such as OFDMA, MU-MIMO and TWT. The R550 is ideal for medium-density deployments such a, K-12 classrooms, residence halls, hallways and office spaces.

The R550 Wi-Fi 6 AP incorporates patented technologies found only in the RUCKUS Wi-Fi portfolio.

- BeamFlex® + Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns
- ChannelFly®: Improved throughput with dynamically changing the channels to use least congested channel



Whether you are deploying ten or ten thousand APs, the R550 is also easy to manage through Cumulus 6's cloud, physical, virtual and controllerless management options.

# RUCKUS Networks R550 Indoor Access Point

Wi-Fi capacity requirements in classrooms, office spaces, and medium-size venues are rising due to the increase in the number of Wi-Fi connected devices.

An increase in bandwidth requirements for applications and an evergrowing assortment of IoT devices puts further strain on already stretched Wi-Fi networks.

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The R550 Wi-Fi 6 AP incorporates patented technologies found only in the RUCKUS Wi-Fi portfolio.

- BeamFlex® + Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns
- ChannelFly®: Improved throughput with dynamically changing the channels to use least congested channel

Whether you are deploying ten or ten thousand APs, the R550 is also easy to manage through Cumulus 6's cloud, physical, virtual and controllerless management options.



# Stunning Wi-Fi performance

Mitigate interference and extend coverage with patented BeamFlex + adaptive antenna technology utilizing several directional antenna patterns.

### Serve more devices

Connect more devices simultaneously with four MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing device performance.

### **Converged Access Point**

Allows customers to eliminate siloed networks and unify Wi-Fi and non-Wi-Fi wireless technologies into one single network by using built-in BLE and Zigbee, and also expand to any future wireless technologies through the USB port.

# Automate optimal throughput

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# Better mesh networking

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### More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and RUCKUS analytics.





# Great Outdoor Wi-Fi

Experience high performance outdoor Wi-Fi 6 with IP-67 weather proofing and dual backhaul options with SFP and multi-gigabit 2.5 GbE ethernet port.

### **Connect More Devices Simultaneously**

Improve device performance, by enabling more simultaneous device connections with built-in 8 spatial streams (dualconcurrent, 4x4:4 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology while enhancing non-Wi-Fi 6 client performance. Support for up to 1,024 clients.

### **High Density Performance**

Provide exceptional end-user experience within high density public venues such as airports, amusement parks, stadiums, outdoor arenas, and other dense outdoor urban environments with the RUCKUS Ultra-High-Density Technology Suite.

# **Converged Access Point**

Allow customers to eliminate siloed networks and unify Wi-Fi and IoT wireless technologies into one single network by using built-in BLE and Zigbee, and also expand to any future wireless technologies through the pluggable IoT module.

# **Power Other Devices**

Daisy chain and power other devices like an IP camera, or another AP directly from the 1 GbE PoE output port.

### Multiple Management Options

Manage the T750 from the cloud, with on-premises physical/ virtual appliances, or without a controller.

# **Enhanced Security**

Reinforce security with WPA3, the latest Wi-Fi security standard and receive enhanced protection from man-in-the-middle attacks.

# **RUCKUS Networks 1750 Outdoor Access Point**

Outdoor 802.11ax 4x4:4 Wi-Fi AP with 2.5Gbps Backhaul

Outdoor locations such as stadiums, arenas can have the most demanding wireless requirements due to high client density. The RUCKUS T750 access point (AP), based on the latest Wi-Fi 6 standard, brings in multi-gigabit Wi-Fi to support the ever raising expectation for highest quality of service from the users. T750 is IP-67 rated to withstand the rigors of outdoor deployments.

The RUCKUS T750 is our high-end dual-band, dual-concurrent Wi-Fi 6 AP that supports eight spatial streams (4x4:4 in 5GHz, 4x4:4 in 2.4GHz). The T750, with OFDMA and MU-MIMO capabilities, efficiently manages up to 1,024 client connections with increased capacity, improved coverage and performance in ultrahigh dense environments. Furthermore, the 2.5 GbE ethernet ensures that the back haul will not be a bottleneck for full use of available Wi-Fi capacity.

The T750 addresses the increasing client demands in public venues such as airports, convention centers, plazas, malls, and other dense urban environments. It is the perfect choice for data intensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-ofservice requirements.

The T750 is also easy to manage through physical, virtual and cloud management options.

The T750 is also designed with a small form factor pluggable (SFP) fiber interface that enable seamless connectivity to a fiber backhaul. The T750 boasts a built-in GPS. Furthermore, 1GbE PoE output port can power a variety of devices like an IPbased camera or even another AP.

In addition, organizations are increasingly leveraging IoT-based sensors to serve their customers better. These sensors run on non-Wi-Fi wireless technologies such as Wi-Fi, BLE or Zigbee. Organizations need a unified platform to eliminate network silos. The RUCKUS AP portfolio is equipped to solve these challenges.

The T750 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the T750 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with pluggable IoT module.

The T750 when paired with the RUCKUS Ultra-High-Density Technology Suite found only in the RUCKUS Wi-Fi portfolio, dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime Decongestion: Increases average network throughput in heavily congested environments
- Transient Client Management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns

Whether you are deploying ten or ten thousand APs, the T750 is also easy to manage through Cumulus 6's cloud, physical, virtual and controllerless management options.



# RUCKUS Networks T750 Outdoor Access Point

Outdoor 802.11ax 4x4:4 Wi-Fi AP with 2.5Gbps Backhaul

Outdoor locations such as stadiums, arenas can have the most demanding wireless requirements due to high client density. The RUCKUS T750 access point (AP), based on the latest Wi-Fi 6 standard, brings in multi-gigabit Wi-Fi to support the ever raising expectation for highest quality of service from the users. T750 is IP-67 rated to withstand the rigors of outdoor deployments.

The RUCKUS T750 is our high-end dual-band, dual-concurrent Wi-Fi 6 AP that supports eight spatial streams (4x4:4 in 5GHz, 4x4:4 in 2.4GHz). The T750, with OFDMA and MU-MIMO capabilities, efficiently manages up to 1,024 client connections with increased capacity, improved coverage and performance in ultrahigh dense environments. Furthermore, the 2.5 GbE ethernet ensures that the back haul will not be a bottleneck for full use of available Wi-Fi capacity.

The T750 addresses the increasing client demands in public venues such as airports, convention centers, plazas, malls, and other dense urban environments. It is the perfect choice for data intensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-of-service requirements.

The T750 is also easy to manage through physical, virtual and cloud management options.

The T750 is also designed with a small form factor pluggable (SFP) fiber interface that enable seamless connectivity to a fiber backhaul. The T750 boasts a built-in GPS. Furthermore, 1GbE PoE output port can power a variety of devices like an IPbased camera or even another AP.

In addition, organizations are increasingly leveraging IoT-based sensors to serve their customers better. These sensors run on non-Wi-Fi wireless technologies such as Wi-Fi , BLE or Zigbee. Organizations need a unified platform to eliminate network silos. The RUCKUS AP portfolio is equipped to solve these challenges.

The T750 has built-in IoT radios with onboard BLE and Zigbee capabilities. In addition, the T750 is a converged access point that allows customers to seamlessly integrate any new wireless technologies with pluggable IoT module.

The T750 when paired with the RUCKUS Ultra-High-Density Technology Suite found only in the RUCKUS Wi-Fi portfolio, dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- Airtime Decongestion: Increases average network throughput in heavily congested environments
- Transient Client Management: Reduces interference traffic from unconnected Wi-Fi devices
- BeamFlex® Antennas: Extended coverage and optimized throughput with patented multidirectional antennas and radio patterns

Whether you are deploying ten or ten thousand APs, the T750 is also easy to manage through Cumulus 6's cloud, physical, virtual and controllerless management options.



# Great Outdoor Wi-Fi

Experience high performance outdoor Wi-Fi 6 with IP-67 weather proofing and dual backhaul options with SFP and multi-gigabit 2.5 GbE ethernet port.

# **Connect More Devices Simultaneously**

Improve device performance, by enabling more simultaneous device connections with built-in 8 spatial streams (dual-concurrent, 4x4:4 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology while enhancing non-Wi-Fi 6 client performance. Support for up to 1,024 clients

# **High Density Performance**

Provide exceptional end-user experience within high density public venues such as airports, amusement parks, stadiums, outdoor arenas, and other dense outdoor urban environments with the RUCKUS Ultra-High-Density Technology Suite.

# **Converged Access Point**

Allow customers to eliminate siloed networks and unify Wi-Fi and IoT wireless technologies into one single network by using built-in BLE and Zigbee, and also expand to any future wireless technologies through the pluggable IoT module.

### **Power Other Devices**

Daisy chain and power other devices like an IP camera, or another AP directly from the 1 GbE PoE output port.

Multiple Management Options

Manage the T750 from the cloud, with on-premises physical/virtual appliances, or without a controller.

# **Enhanced Security**

Reinforce security with WPA3, the latest Wi-Fi security standard and receive enhanced protection from man-in-the-middle attacks.

WhyReboot will be offering the new RUCKUS Wi-Fi 6 network systems with our new Cumulus6 package that includes both cloud access & analytics. This new package, exclusive to WhyReboot dealers, will include:

- Best Pricing In The Industry
- o 24/7 365 Support
- Next Business Day Advanced Replacement for Indoor APs

# WhyReboot's Cumulus6 Package: CLOUD AND ANALYTICS



- APs can be drop shipped from anywhere and as soon as they arrive and are plugged into a network they'll automatically configure and be ready to go. This means product and systems can reach partners in record time.
- An app which allows partners to log in from anywhere to diagnose issues or make changes, should they decide they'd like to do it themselves without our assistance.
- Unlike Meraki or other providers, if the license is not renewed, the APs will continue to function as normal, they just won't have access to make changes or view analytics.
- Reporting and Analytics allows quick resolution to problems and the ability to head off problems before they arise. The machine-learning analytics system tells you, in plain English, where the problem is and how to fix it. No more vague error messages or hunting to find an issue.

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# **Benefits**

### Stackability Simplifies Management

- Class-leading stacking scalability with up to 12 switches per stack
- Long-distance stacking up to 10 km using standard optics or cables

# 10 GbE Ports Optimize Network Performance

• Up to 8 10 GbE SFP+ ports for stacking or uplinks

# **Dual Power Supplies for High Availability**

• Dual load-sharing, hot-swappable power supplies available on the Z-Series switch

# Multigigabit Support Enables Next Generation Wireless Deployment

• Up to 16x 2.5 and 2x 2.5/5/10 GbE ports optimized for Wi-Fi 5 and 6 deployment

### Class leading PoE Budget to Power Advanced Edge Devices

- PoE+/PoH/802.3bt budget (up to 1,480 watts)1
- Support advanced wireless APs and video surveillance equipment

# Silent Operation for Deployment in the Work Environment

 Fanless design or fanless mode enables silent non-disruptive deployment anywhere

# **Advanced L3 Maximizes Flexibility**

• OSPF, VRRP, PIM, PBR L3 features

# Campus Fabric Reduces Cost of Operations, Increases Flexibility

- Ruckus Campus Fabric delivers the benefits of a chassis with the flexibility of stackables
- Scales to over 1800 ports

# Ruckus ICX 7150

# ENTERPRISE-CLASS STACKABLE ACCESS SWITCH

# Access Switch Series Delivers Unprecedented Performance and Features in its Class

The Ruckus® ICX® 7150 series of stackable switches delivers the performance, flexibility, and scalability required for enterprise access deployment, raising the bar with non-blocking performance and up to 8x10 GbE ports for uplinks or stacking. It offers seamless interoperability with Ruckus wireless products to deliver unified wired and wireless network access. In addition, Ruckus Multigigabit Ethernet technology offers bandwidth speeds needed to optimize performance of the latest generation high performance wireless access points and edge devices, over standard Ethernet cables.



# Ruckus ICX 7150 Switches

The standard Ruckus ICX 7150 switches are available in 24-, and 48-port 10/100/1000 Mbps models with four 1/10 GbE dual purpose uplink/ stacking ports. These switches are available with or without PoE+ power.

Silent operation is available for out-of-closet environments.

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# Ruckus ICX 7150 Z-Series Switch

The Ruckus ICX 7150-48ZP 48-port switch adds higher performance, greater resiliency and increased PoE power. The switch offers Multigigabit technology (IEEE 802.3bz) to match the highest performing 802.11ac Wave 2 wireless access points available, with dual redundant, hot-swappable power supplies and fans, and up to 8x10 GbE uplink/stacking ports.

The switch offers 16 Multigigabit (100Mbps/1Gbps/2.5Gbps) ports, each with Power-over-HDBaseT (PoH) up to 90 watts and 802.3bt ready, plus 32 10/100/1000 Mbps ports with PoE+. With a maximum PoE budget of 1480 watts, this switch delivers the power, and performance, to drive PoE+ power to all 48 ports.

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# **10 GbE Ports Optimize Network Performance**

• Up to 8 10 GbE SFP+ ports for stacking or uplinks

# **Dual Power Supplies for High Availability**

• Dual load-sharing, hot-swappable power supplies available on the Z-Series switch

# Multigigabit Support Enables Next Generation Wireless Deployment

• Up to 16x 2.5 and 2x 2.5/5/10 GbE ports optimized for Wi-Fi 5 and 6 deployment

# Class leading PoE Budget to Power Advanced Edge Devices

- PoE+/PoH/802.3bt budget (up to 1,480 watts)1
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# Ruckus ICX 7150 Compact Switches

The Ruckus ICX 7150 compact switches come in 8, 10 and 12 ports models and feature a fanless design to operate silently in out-of-closet environments such as offices, classrooms, and retail spaces. They offer PoE on all ports. The ICX 7150-C10ZP delivers up to 90W per port of PoE power and multigigabit Ethernet at 2.5/5/10 Gbps speeds. With 2x1/10 GbE uplink/stacking ports, the ICX 7150-C12P and C10ZP deliver high performance in a small package.



# Benefits

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# Simplicity

RUCKUS' Outdoor APs make Wi-Fi deployments extremely simple to deploy with one-touch technologies like SmartMesh™.

# Stunning Wi-Fi Performance

Extends coverage with patented BeamFlex + adaptive antenna technology while mitigating interference by utilizing up to 64 directional antenna patterns.

### Great Outdoor Wi-Fi

Experience high performance outdoor Wi-Fi 6 with IP-67 weather proofing.

# **Multiple Management Options**

Manage the T350 Series with physical or virtual controller appliances.

# Serve More Devices

Connect more devices simultaneously with two MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while also enhancing non-11ax device performance.

### **Automate Optimal Throughout**

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

## More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPOT Wi-Fi locationing engine, and RUCKUS analytics.

# RUCKUS Networks T350 Outdoor Access Point

Outdoor 802.11ax 2x2:2 Wi-Fi Access Point

Modern Wi-Fi device users expect reliable connectivity—anywhere, anytime. But in crowded outdoor venues with thousands of users and constant RF noise, they are often frustrated by poor coverage, dropped connections, and reduced data rates. These aggravating Wi-Fi experiences can easily translate to negative perceptions of the venue and the service provider, resulting in loss of business. The quality of the network experience becomes the "litmus test" for acceptance or rejection.

As the market leader in outdoor Wi-Fi deployments, RUCKUS knows that one AP solution cannot meet every possible challenge of varied and complex outdoor requirements. This is why the RUCKUS T350 Wi-Fi 6 series is designed with more variety than any other outdoor AP in the market today. Available with either internal omni-directional antennas or internal high-gain directional antenna models, the T350 Series uses patented RUCKUS antenna optimization and interference mitigation technologies to improve throughput, connection reliability, and deliver industry-leading

Wi-Fi 6 performance to every connected client. At the same time, the T350 Series is designed for fast, simple installation with an ultralightweight, low profile, IP-67 rated enclosure that can stand up to the most challenging outdoor environments.

At RUCKUS, we know that outdoor AP deployments are especially challenging for installation and maintenance, which is why RUCKUS outdoor APs use a variety of technologies, like SmartMesh that help simplify outdoor AP deployment.

The RUCKUS T350 Series is perfect for high-density outdoor public venues such as airports, convention centers, plazas, malls, smart cities, and other dense urban environments. By providing a superior Wi-Fi experience to every user in high-density outdoor locations, venue operators can improve guest satisfaction and loyalty, deliver new kinds of wireless application services, and increase revenues.

The RUCKUS T350 Series incorporates patented technologies found only in the RUCKUS Wi-Fi portfolio.

- Extended coverage with patented **BeamFlex+** utilizing multi-directional antenna patterns.
- ChannelFly®: Improved throughput with dynamically changing the channels to use least congested channel



# **RUCKUS Networks 1350 Outdoor Access Point**

Outdoor 802.11ax 2x2:2 Wi-Fi Access Point

Modern Wi-Fi device users expect reliable connectivity-anywhere, anytime. But in crowded outdoor venues with thousands of users and constant RF noise, they are often frustrated by poor coverage, dropped connections, and reduced data rates. These aggravating Wi-Fi experiences can easily translate to negative perceptions of the venue and the service provider, resulting in loss of business. The quality of the network experience becomes the "litmus test" for acceptance or rejection.

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- ChannelFly®: Improved throughput with dynamically changing the channels to use least congested channel

Whether you are deploying ten or ten thousand APs, the T350 Series is easy to manage through RUCKUS' appliance and virtual management options.



# Benefits

# **Simplicity**

RUCKUS' Outdoor APs make Wi-Fi deployments extremely simple to deploy with one-touch technologies like SmartMesh™

# Stunning Wi-Fi Performance

Extends coverage with patented BeamFlex + adaptive antenna technology while mitigating interference by utilizing up to 64 directional antenna patterns.

### Great Outdoor Wi-Fi

Experience high performance outdoor Wi-Fi 6 with IP-67 weather proofing.

# **Multiple Management Options**

Manage the T350 Series with physical or virtual controller appliances.

# **Serve More Devices**

Connect more devices simultaneously with two MUMIMO spatial streams and concurrent dual-band 2.4/5GHz radios while also enhancing non-11ax device performance.

# **Automate Optimal Throughout**

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

# More Than Wi-Fi

Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi





# FORTINET WR60F NGFW (Next Generation Firewalls)

# **Features**

Notable Base unit features (No Security or Management Subscription):

Secure and Encrypted Remote Access

SD-WAN Capabilities for Multi-WAN Deployments and Redundancy

**Internet Speed Test** 

Packet Monitoring

Zero-Touch Provisioning

3G/4G WAN Connectivity

**VLAN Segmentation** 

Firewall Access Rules

Traffic Shaping

# Notable Security Subscription Features:

Customers can rest assured knowing that our security efficacy is backed by sustained year-over-year certifications and rigorous testing by leading organizations including NSS Labs, ICSA Labs, Common Criteria, Virus Bulletin, Virus Bulletin Spam, Mitre, Oasis, and NASA. This program makes this the most certified and proven security solution available in the industry.

Our line of NGFW (Next Generation Firewalls) are provided by Fortinet with models, licensing, and configurations hand-picked from our team and tailored specifically for integrated systems. New features include the ability to manage and access the appliance behind modem's that aren't bridged (double NAT), the ability to perform a speed test direct from the gateway, and reporting capabilities that allow us to send scheduled reports to any email address you choose.

Aside from being a fully functioning router with advanced features, our platform ingests and analyzes 100 billion events every day, on average, to deliver over one billion security updates daily to protect against new, unknown threats.

# **Subscription Benefits:**

Up to the minute threat intelligence in real time to stop the latest

Insight into threats anywhere in the world through a global network of more than three million sensors

Fast and comprehensive intelligence via automated and advanced analytics (such as machine-learning) being applied to cross discipline information

Prevention of exploitation of new avenues of attack with proactive threat research

Top-rated effectiveness achieved through the commitment to independent, real-world testing

# FORTINET WR60F NGFW (Next Generation Firewalls)

Included in our 360 Protection Subscription:



**Gateway Antivirus** delivers automated updates that protect against the latest viruses, spyware, and other content-level threats. It uses industry-leading advanced detection engines to prevent both new and evolving threats from gaining a foothold inside your network and accessing its invaluable content.

Intrusion Prevention (IPS) automated updates provide latest defenses against network intrusions by detecting and blocking threats before they reach your network devices. You get the latest defenses against stealthy network-level threats, a comprehensive IPS Library with thousands of signatures, resistance to evasion techniques proved by NSS Labs, and IPS signature lookup service.

Application Control improves security with real-time visibility into the applications that are running. With Application Control, you can quickly create policies to allow, deny, or restrict access to applications or entire categories of applications. The sophisticated detection signatures identify Apps, DB applications, web applications and protocols; both Block/Allow List approaches can allow or deny traffic. Traffic shaping can be used to prioritize applications and flexible policies enable full control of attack detection methods.

Indicators of Compromise (IOC) service is an automated breach defense system that continuously monitors your network for attacks, vulnerabilities, and persistent threats. It provides protection against legitimate threats, guarding customer data and defending against fraudulent access, malware, and breaches. It also helps detect and prevent fraud from compromised devices or accounts.

Web Application Firewall (WAF) Automated signature updates that protect against SQL injection, cross-site scripting, and various other attacks, hundreds of vulnerability scan signatures, data-type and web robot patterns, and suspicious URLs. Supports PCI DSS compliance by protecting against OWASP top 10 vulnerabilities and using WAF technology to block attacks.

Web Filtering blocks and monitors web activities to enable things like parental controls or to keep users protected from going to potentially harmful websites. The massive web content rating databases power one of the industry's most accurate web filtering services. Granular blocking and filtering provide web categories to allow, log, or block. The comprehensive URL database provides rapid and comprehensive protection. Credential stuffing defense identifies login attempts using credentials that have been compromised using an always up-to-date feed of stolen credentials.

Cloud Sandbox Service is an advanced threat detection solution that performs dynamic analysis to identify previously unknown malware (aka Zero-Day Threats). Actionable intelligence generated by the Sandbox is fed back into preventive controls within your network—disarming the threat. This Sandbox is NSS Labs Recommended for breach detection and breach prevention, and ICSA Labs certified for advanced threat defense.

SD-WAN Advanced Services include bandwidth monitoring, enabling not only accurate speed tests to ensure the ISP is living up to their promised speed, but also to create failover and routing adjustments for multiple internet connections. This enables the home to always prioritize traffic over the best available internet provider and/or connection.

**IOT Detection Service** Can find and catalog unknown IoT devices on the network, allowing for additional segmentation and protection of the internal network.



# FORTINET WR100F NGFW (Next Generation Firewalls)

# **Features**

Notable Base unit features (No Security or Management Subscription):

Secure and Encrypted Remote Access

SD-WAN Capabilities for Multi-WAN Deployments and Redundancy

**Internet Speed Test** 

Packet Monitoring

Zero-Touch Provisioning

3G/4G WAN Connectivity

**VLAN Segmentation** 

Firewall Access Rules

Traffic Shaping

# **Notable Security Subscription Features:**

Customers can rest assured knowing that our security efficacy is backed by sustained year-over-year certifications and rigorous testing by leading organizations including NSS Labs, ICSA Labs, Common Criteria, Virus Bulletin, Virus Bulletin Spam, Mitre, Oasis, and NASA. This program makes this the most certified and proven security solution available in the industry.

Our line of NGFW (Next Generation Firewalls) are provided by Fortinet with models, licensing, and configurations hand-picked from our team and tailored specifically for integrated systems. New features include the ability to manage and access the appliance behind modem's that aren't bridged (double NAT), the ability to perform a speed test direct from the gateway, and reporting capabilities that allow us to send scheduled reports to any email address you choose.

Aside from being a fully functioning router with advanced features, our platform ingests and analyzes 100 billion events every day, on average, to deliver over one billion security updates daily to protect against new, unknown threats.

# **Subscription Benefits:**

Up to the minute threat intelligence in real time to stop the latest threats

Insight into threats anywhere in the world through a global network of more than three million sensors

Fast and comprehensive intelligence via automated and advanced analytics (such as machine-learning) being applied to cross discipline information

Prevention of exploitation of new avenues of attack with proactive threat research

Top-rated effectiveness achieved through the commitment to independent, real-world testing

# FORTINET WR100F NGFW (Next Generation Firewalls)

Included in our 360 Protection Subscription:



**Gateway Antivirus** delivers automated updates that protect against the latest viruses, spyware, and other content-level threats. It uses industry-leading advanced detection engines to prevent both new and evolving threats from gaining a foothold inside your network and accessing its invaluable content.

Intrusion Prevention (IPS) automated updates provide latest defenses against network intrusions by detecting and blocking threats before they reach your network devices. You get the latest defenses against stealthy network-level threats, a comprehensive IPS Library with thousands of signatures, resistance to evasion techniques proved by NSS Labs, and IPS signature lookup service.

Application Control improves security with real-time visibility into the applications that are running. With Application Control, you can quickly create policies to allow, deny, or restrict access to applications or entire categories of applications. The sophisticated detection signatures identify Apps, DB applications, web applications and protocols; both Block/Allow List approaches can allow or deny traffic. Traffic shaping can be used to prioritize applications and flexible policies enable full control of attack detection methods.

Indicators of Compromise (IOC) service is an automated breach defense system that continuously monitors your network for attacks, vulnerabilities, and persistent threats. It provides protection against legitimate threats, guarding customer data and defending against fraudulent access, malware, and breaches. It also helps detect and prevent fraud from compromised devices or accounts.

Web Application Firewall (WAF) Automated signature updates that protect against SQL injection, cross-site scripting, and various other attacks, hundreds of vulnerability scan signatures, data-type and web robot patterns, and suspicious URLs. Supports PCI DSS compliance by protecting against OWASP top 10 vulnerabilities and using WAF technology to block attacks.

Web Filtering blocks and monitors web activities to enable things like parental controls or to keep users protected from going to potentially harmful websites. The massive web content rating databases power one of the industry's most accurate web filtering services. Granular blocking and filtering provide web categories to allow, log, or block. The comprehensive URL database provides rapid and comprehensive protection. Credential stuffing defense identifies login attempts using credentials that have been compromised using an always up-to-date feed of stolen credentials.

Cloud Sandbox Service is an advanced threat detection solution that performs dynamic analysis to identify previously unknown malware (aka Zero-Day Threats). Actionable intelligence generated by the Sandbox is fed back into preventive controls within your network—disarming the threat. This Sandbox is NSS Labs Recommended for breach detection and breach prevention, and ICSA Labs certified for advanced threat defense.

SD-WAN Advanced Services include bandwidth monitoring, enabling not only accurate speed tests to ensure the ISP is living up to their promised speed, but also to create failover and routing adjustments for multiple internet connections. This enables the home to always prioritize traffic over the best available internet provider and/or connection.

IOT Detection Service Can find and catalog unknown IoT devices on the network, allowing for additional segmentation and protection of the internal network.





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**INNOVATIONS** 

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