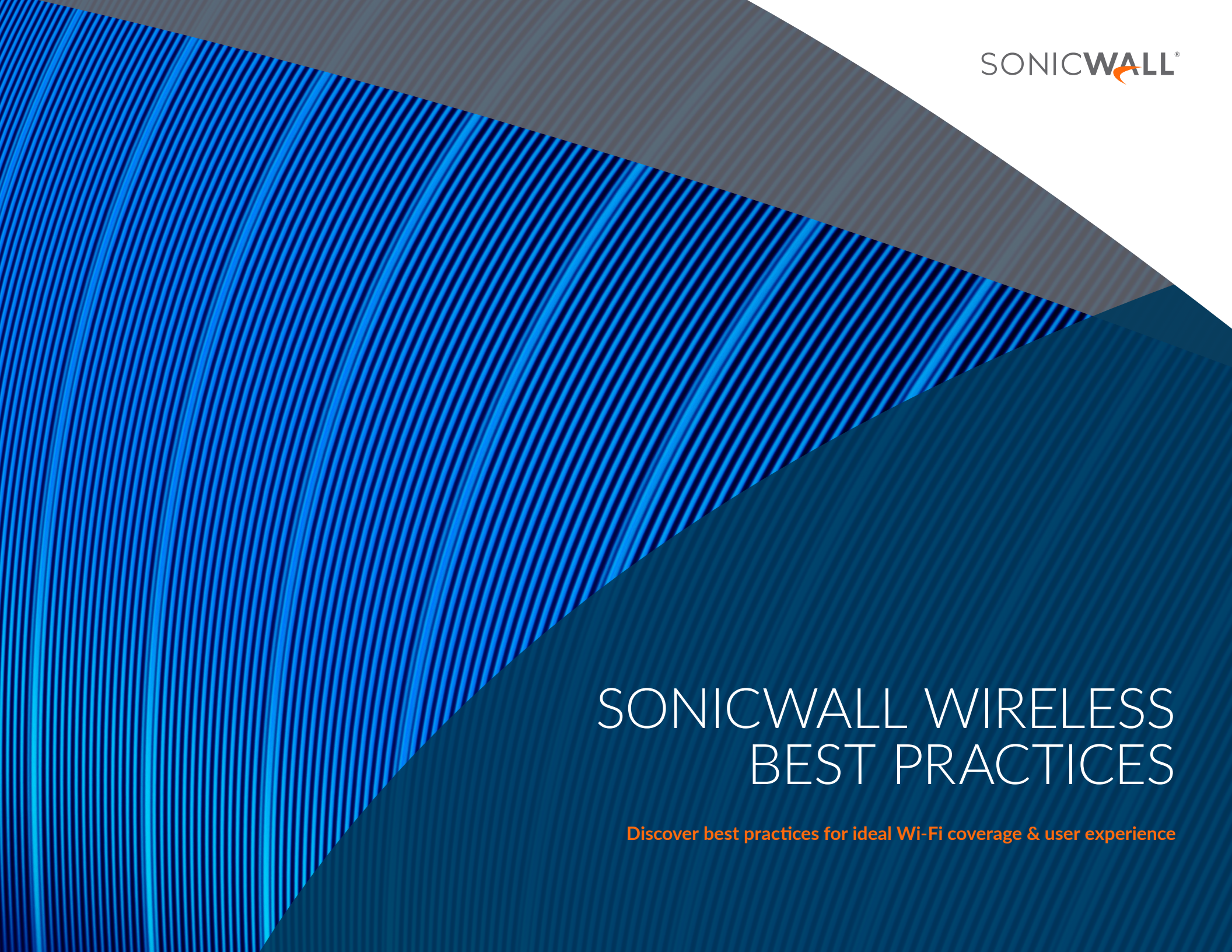

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SONICWALL WIRELESS BEST PRACTICES

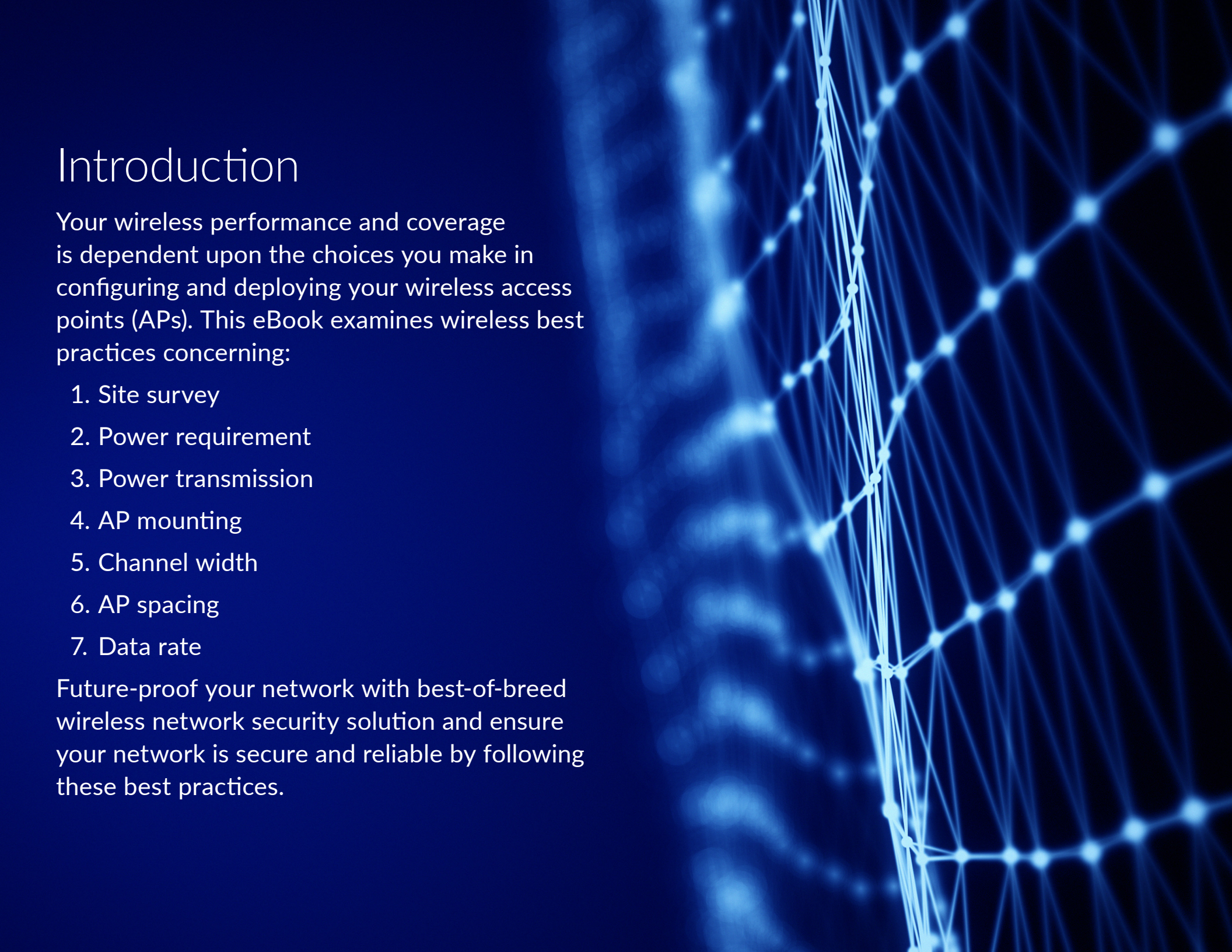
Discover best practices for ideal Wi-Fi coverage & user experience

Introduction

Your wireless performance and coverage is dependent upon the choices you make in configuring and deploying your wireless access points (APs). This eBook examines wireless best practices concerning:

1. Site survey
2. Power requirement
3. Power transmission
4. AP mounting
5. Channel width
6. AP spacing
7. Data rate

Future-proof your network with best-of-breed wireless network security solution and ensure your network is secure and reliable by following these best practices.



1

Site survey

Before deploying your APs, it is critical to understand your environment and the type of deployment you require. Would you prefer coverage over density, or vice versa? Ensure you are prepared for data traffic during peak hours on your wireless network.

Performing a site survey before deploying your wireless network can help determine how many access points are required, and what type of coverage you can expect with your APs.

2 Power requirements

It is essential to check the power compliance of your AP before connecting it to your network. The maximum power from an 802.3af source is 15.4W, whereas that from 802.3at is 50W. Make sure that your power supply is backward compatible with 802.3af devices.

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3

Transmit power

Blasting your AP at full power does not ensure maximum performance. While it would showcase more coverage, the user experience may be impacted. Based on your environment, it is essential to tweak the transmit power of the AP.

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AP mounting

APs are built to work in certain use cases or environments and is critical for ubiquitous coverage. For instance, an indoor, integrated-antenna AP is designed to work as a ceiling-mount AP in spaces like indoor office environments. This is because APs with integrated, omni-directional antennas have a 360 degree radiation pattern. Additionally, barriers like walls, concrete and metal partitions can cause RF blockage.

5 Channel width

For high-density deployments, it is essential to choose lower channel widths, such as 20 MHz and 40 MHz. With 80MHz channels, there are just five non-overlapping channels, while for 160 MHz, there are only two non-overlapping channels. This makes it hard to deploy the higher channel widths without causing co-channel interference. Higher channel widths are ideal for low-density, high-performance requirements.

6

AP spacing

APs should be deployed based on your coverage or density requirements. For high-density, high-bandwidth requirements, deploy your APs every 60 feet. Make sure your Received Signal Strength Indicator (RSSI) stays above -65 dBm. Signal levels of up to -65 dBm is recommended for VOIP and streaming.

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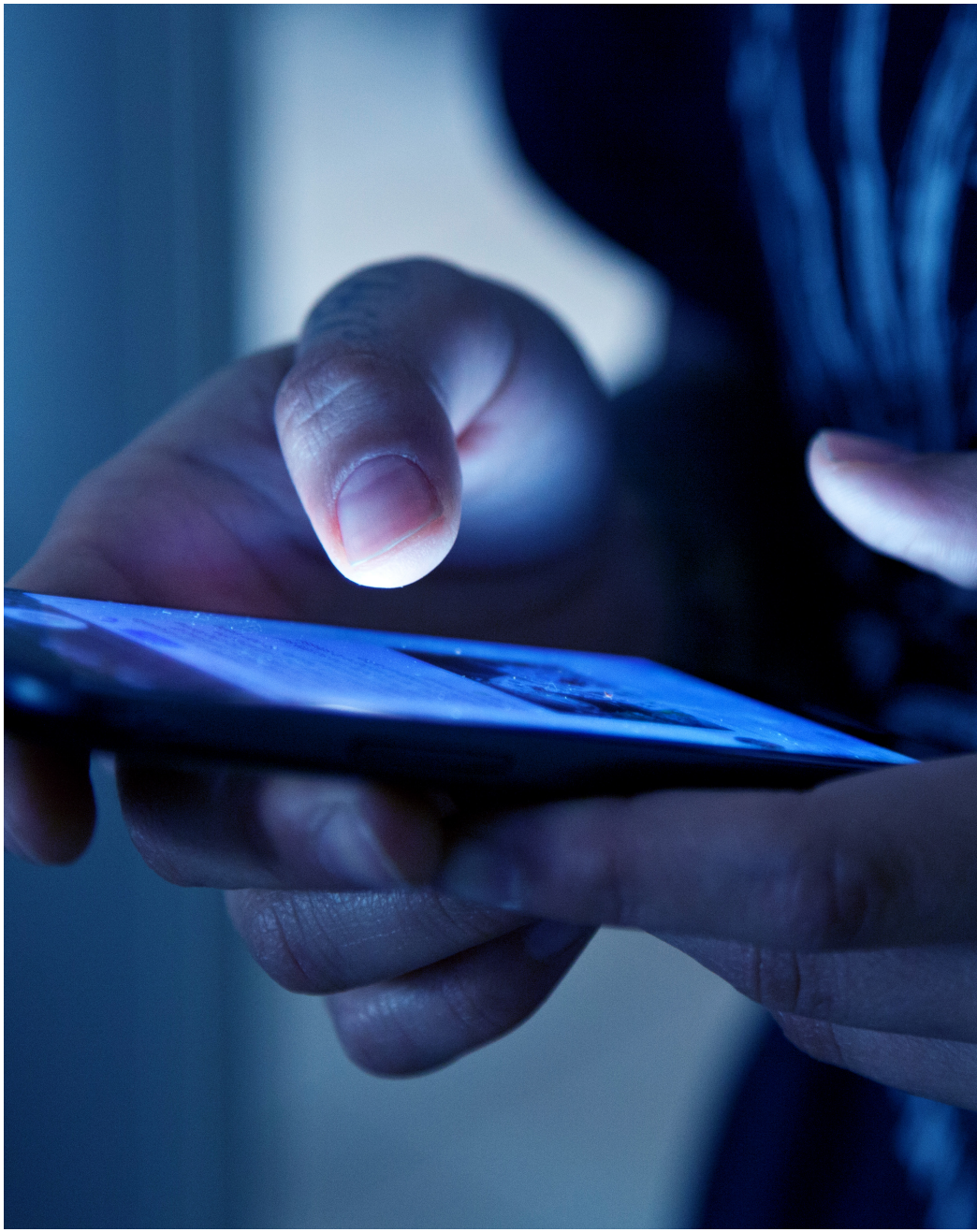
7

Data rates

Based on your coverage design, it is advisable to turn off lower data rates below 24 Mbps. This ensures that the AP and client do not communicate at low data rates, which could result in low performance and lead to a poor user experience.



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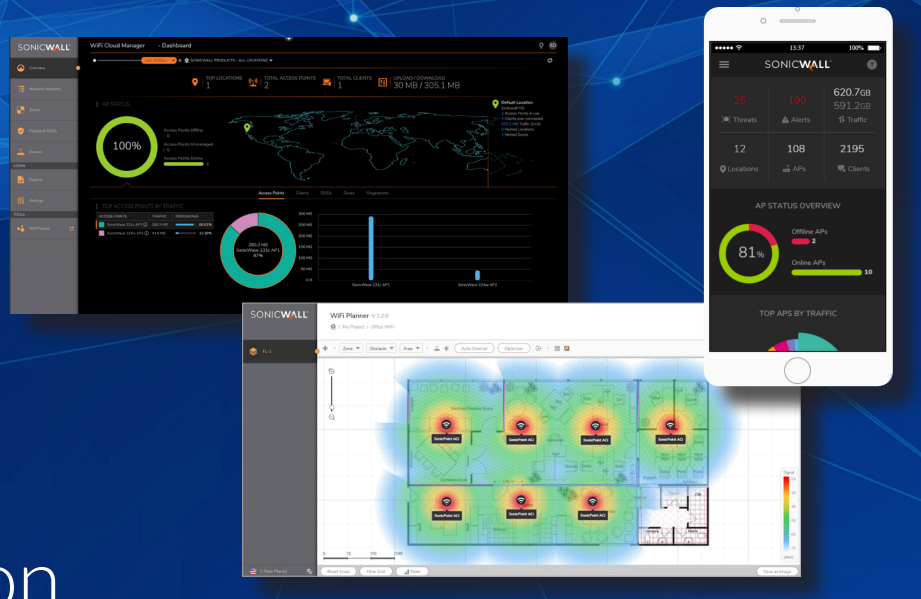
Effectively plan your deployment with WiFi Planner and manage your networks from the cloud with WiFi Cloud Manager.



SonicWall Wireless Solution

The SonicWall SonicWave Series of high-speed wireless access points delivers the performance, range and reliability of 802.11ac Wave 2 technology and ensures wireless traffic is secured from network threats.

Highlights:

1. 802.11ac Wave 2 Performance
2. Management Flexibility via the Cloud or Firewalls
3. Advanced Security Features
4. Zero-Touch Deployment
5. Single-Pane-Of-Glass Management and Visibility
6. Dedicated Third Radio for Security Scanning
7. Able to Withstand Rugged Conditions
8. Rich RF Features and Services
9. Wireless Network Planning & Design Tools
10. Low TCO


To learn more, visit:
SONICWALL.COM/SECURE-WIRELESS

About SonicWall

SonicWall has been fighting the cybercriminal industry for over 27 years defending small and medium businesses, enterprises and government agencies worldwide. Backed by research from SonicWall Capture Labs, our award- winning, real-time breach detection and prevention solutions secure more than a million networks, and their emails, applications and data, in over 215 countries and territories. These organizations run more effectively and fear less about security. For more information, visit www.sonicwall.com or follow us on Twitter, LinkedIn, Facebook and Instagram.

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