WR900 Installation: Best Practices and Wireless Strength & Quality

TB-00014-01

Mounting and Orientation

Equipped with both an external 2.4 GHz antenna and an internal 900 MHz antenna, the WR900 is intended to be mounted on a wall. It is important to keep it away from other wireless signal-emitting and networking devices. Further details can be found in the WR900 installation guide.

For optimal distance and quality of the 2.4 GHz signal, orient the external antenna upwards and away from the ground.

For optimal distance and quality of the 900 MHz signal, mount the repeater with its logo facing upwards for legibility.



2.4 Ghz Antenna 900 Mhz Antenna B^{900 Mhz} Antenna B^{900 Mhz} Antenna B^{900 Mhz} Antenna

Wireless Shape

The WR900 features omni-directional antennas that transmit on a singal plane in a pattern similar to a doughnut. Recognizing this pattern is crucial to determine best practice to achieve wireless propagation across your facility.

For optimal wireless output, the WR900 should be mounted on a wall and positioned upright with antennas pointing away from the ground. This ensures that the strongest wireless output will properly spread in parallel to the ground plane. This orientation maximizes communication distance across a facility or campus, ensuring reliable connectivity.

Common Installation Mistakes to Avoid

There are a variety of mounting situations to avoid. Below are the most common which can dramatically reduce wireless strength and quality:



Improper Antenna Orientation

The 2.4 GHz signal will transmit vertically rather than horizontally; resulting in a reduction in wireless coverage.



In Proximity to Other Network Devices

The signal will becomes vulnerable to interference caused by nearby powerful transmissions.



Left on a Shelf, Table, or Horizontal Surface

The 900 MHz signal will transmit vertically rather than horizontally; resulting in a reduction in wireless coverage.



Enclosed in Wireless Dampening Material

The signal will experiences a significant reduction in reach as the material obstructs its transmission.

