



Capacity increase through SDMA

Wavion's unique Spatial Division Multiple Access (SDMA) technology enables you to double the downlink capacity of any of your Wavion base stations through a simple software upgrade procedure. No additional hardware installation required.

Wavion's SDMA technology allows simultaneous transmission of two different data streams over the same frequency, to two different clients. SDMA can interoperate with any standard based Wi-Fi client, keeping capacity increase completely independent of the WiFi client type or model.

Wavion's SDMA provides similar capacity gains as of 802.11n with existing infrastructure. These benefits are provided without a forklift upgrade of CPEs or base station, or any software upgrade to Wi-Fi clients or CPEs.

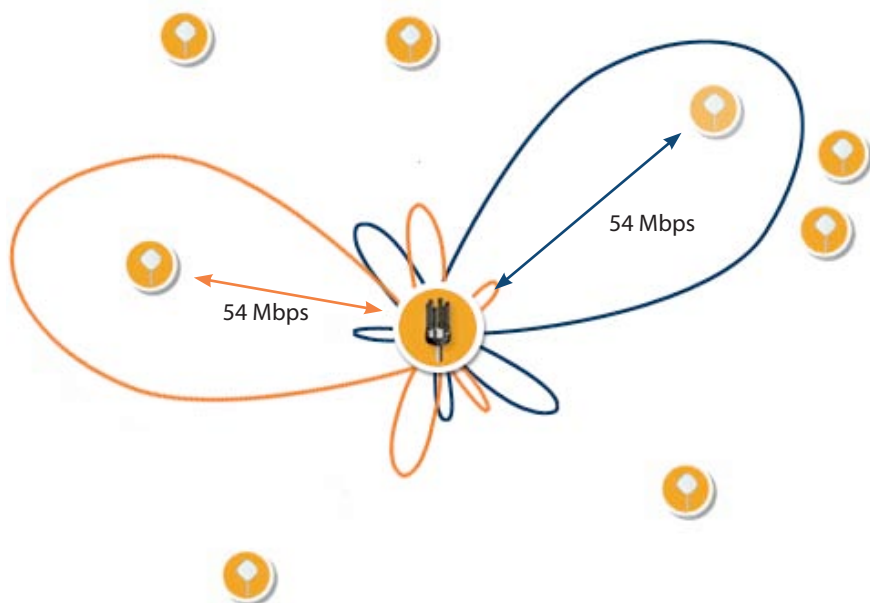
An additional enhancement to Wavion's family of spatially adaptive Base Stations, the SDMA feature enables Wavion's customers to increase their network capacity through a simple procedure, without adding sites or incurring more installation costs.

Apart from its new SDMA functionality, which provides capacity gains similar to current generation 802.11n capacity gains, Wavion's base stations provide beamforming capabilities, which are not available in current generations of 802.11n. This beamforming capability adds an average of 10dB link gain to any standard WiFi client, enabling extended coverage and higher throughputs.

The SDMA capability is available as a SW upgrade to Wavion's family of 2.4 GHz and 5.8 GHz Base Stations and can be remotely controlled and monitored through Wavion's Web access application.

Technology

The SDMA technology is based on the core beamforming technology incorporated in Wavion's specially designed ASIC. The SDMA functionality is enabled by simultaneously directing two separate beams at two users, each with a null directed to the other users. This ensures that each stream is received by the targeted user without cross-interference.



Features & Benefits

- Software enabled capacity increase - double your capacity through a simple software upgrade procedure
- Up to 108Mbps modem rate per Base Station
- Tomorrows 802.11n benefits today, on your existing Wavion Base Station infrastructure
- SDMA capacity increase is available for any 802.11a/b/g or 802.11n client – no changes to the Wi-Fi client's software or driver required
- Available for the complete Wavion Base Station 2.4 GHz and 5.8 GHz product line

Specifications

- Minimum SNR: 12dB
- Standard 802.11b/g client (clients must be angularly separated by at least 10 degrees relative to the base station)
- Control and management via Wavion's web management application
- Remote software upgrade

Maximum throughput achieved in previous versions			Maximum throughput achieved in version 4.0 (SDMA enabled)		
UDP DL	TCP DL	Max modem rate	UDP DL	TCP DL	Max modem rate
26Mbps	17.7Mbps	54Mbps	53Mbps	32Mbps	108Mbps