



## Major Hospital System in the Midwest Improves Wireless Service with TerraWave Solutions®

### Executive Summary

#### Company Focus

- Non-profit hospital and medical center serving major metropolitan area

#### Business Challenge

- Expanding wireless in a challenging environment with healthcare regulations
- Maintaining the aesthetics of the hospital with the addition of the wireless network equipment

#### Solutions

- 24"x24"x1.5" MIMO Universal Ceiling Tile Enclosure for Cisco 1142 & 3500i
- 24x24x4 MIMO Ceiling Tile Enclosure with Key Lock
- 802.11n 2.4/5 GHz 2.5/4 dBi Ceiling Mount Mini MIMO Omnidirectional Antenna
- 802.11n 2.4/5 GHz 6 dBi Outdoor Omni Antenna
- 802.11n 2.4/4.9-5.8 GHz 2/3 dBi MIMO Rubber Duck Antenna
- 14x12x6 Heated & Cooled Enclosure with Solid Door & CAT60 Lock
- 12x10x6 Enclosure with Solid Door and CAT60 Lock

#### Benefits

- Successfully deployed an intricate wireless system in every area of the hospital & medical center
- Uses Cisco's CleanAir technology for maximum optimization of the wireless network



#### Challenge

This not-for-profit hospital system is a leader in the healthcare industry and has developed innovative and life-saving treatments across all medical specialties. Some of the most renowned physicians and scientists work at this hospital center and help to develop and test the effectiveness and safety of new therapies and medical devices.

With this pioneering spirit, the hospital system wanted to expand and improve their overall technology and wireless system as part of an initiative called "The Hospital of The Future." This would allow the hospital to provide efficient and reliable wireless service not only to the doctors and staff but also to the patients and their families. They wanted the wireless service to have wider coverage and not be limited to just certain areas. Therefore the plan was to install wireless equipment in every area of the hospital from patient rooms to stairwells.

#### Solution

TerraWave Solutions worked closely with the hospital system's VAR/system integrator to develop a solution from the access point out. There were already Cisco access points throughout the locations. Some of these access points used Cisco CleanAir technology - which improves the air quality by providing automatic adjustments wherever Radio Frequency interference exists and then circumvents around the interference to provide a solid and reliable wireless coverage.

For detailed product information and to purchase product, please contact a TerraWave Solutions wireless networking solutions sales engineer at 210-375-8482, 800-851-4965, [sales@terrawave.com](mailto:sales@terrawave.com) or visit [www.terrawave.com](http://www.terrawave.com).

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24" x 24" x 4" MIMO Ceiling Tile Enclosure with Key Lock



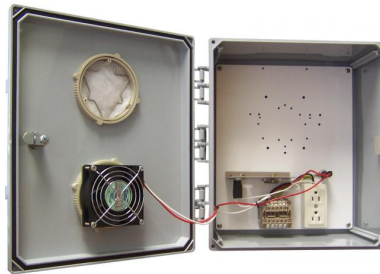
24" x 24" x 1.5" MIMO Universal Ceiling Tile Enclosure



2.4/5 Ghz Mini MIMO Ceiling Mount Omnidirectional Antenna



2.4/5 Ghz 6 dBi MIMO Outdoor Omnidirectional Antenna



14x12x6 Heated & Cooled Enclosure with Solid Door, CAT60 Lock



12x10x6 Enclosure with Solid Door, CAT60 Lock

TerraWave Solutions provided the hardware for the overall solution and included ceiling tile enclosures that keep the AP above the ceiling while the antennas are mounted from below. This particular configuration keeps the need for infection control measures to a minimum since the plenum area remains closed and if work needs to be done on the AP, the enclosure can be opened in the work area. All of the enclosures include a CAT60 lock for maximum protection from theft and tampering. The heated and cooled enclosure offers maximum protection for the wireless equipment no matter what the weather is.

The ceiling mount antennas allowed the hospital to experience the benefits of MIMO technology while still keeping the environmental aesthetics pleasing. The MIMO Outdoor Omni antennas are designed with a durable exterior that makes it able to withstand exposure to moisture and dust.

The hospital was so pleased by the results of their new, upgraded wireless system that they've already chosen to use TerraWave Solution products for the future opening of a new hospital wing.