What is a Cellular Repeater System or Cell Phone Booster?
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Abstract / Business Case

Cellular signal is deficient inside buildings for many different reasons. A lot of time it is the construction materials making up the building itself (Brick, concrete, different types of glass, etc) that prevents RF from penetrating into it. Other factors, such as distance from a cell tower or other structures in between the building at the cell tower preventing line of sight will prevent cellular signal. This is where equipment such as a Cellular Repeater System such as those found on www.cellularsolutions.com will benefit the end user by allowing external cellular signal to be amplified throughout a space inside the building.

Introduction

Cellular Repeater Systems or Cell Phone Boosters operate by gathering external cellular signal with some type of antenna typically place on or at the roof of the building. This antenna can be directional or omni-directional. This signal is then transferred to a Bi-Directional Amplifier (BDA) through the usage of a low-loss coaxial cable. The responsibility of the amplifier is to provide gain to the signal captured by the external antenna. From the amplifier, the signal is then transported to one or multiple internal antennas also using low-loss coaxial cable. These internal antennas can also be directional or omni-directional depending on the application and are the components that will redistribute the signal throughout the required space. Since this system is amplifying available external signal, it is appropriate that there be some type of external signal availability, otherwise the amplifier will, in essence, amplify nothing.

Proposed Solution(s)

Now that you have an understanding of a basic Cellular Repeater System, it is now the time to determine what type of system to implement for your necessity. This is where resources such as www.cellularsolutions.com come into play. There are experts available who will gather information from you to make the appropriate recommendation. These cellular signal experts will have the knowledge to meet your needs as far as coverage is concerned as well as being able to provide multiple options to also help with budgetary concerns. Companies like Cellular Solutions have been around for many years and have a wide customer base and experience necessary for any scope of work.

Future Direction / Long-Term Focus

A question often raised with Cellular Repeater Systems is how long before the equipment is obsolete? A great question and a fair answer is that depending on your needs and specific
technologies available, it will be many years before permanent changes will need to take place. Many of the components for Cellular Repeater Systems provided from companies like Cellular Solutions are wide-band, meaning they have the capacity to operate on many frequencies, typically those utilized and planned to be utilized by the carriers. There are also components that easily allow the inclusion of a BDA specific to the required frequency into an existing system. This makes for a less costly opportunity as opposed to eliminating the existing BDA altogether.

Results / Conclusion

When compared to other options available on the market, Cellular Repeater Systems, such as those provided by Cellular Solutions are the most effective forms of enhancing cellular signal.

Appendices

Appendix C – Authors

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