

Smarter Homes, Smarter Networks:

How the Right Structured Media[™] Enclosure is Vital to Enabling the Smart Home

As homes become smarter, the residential Wi-Fi network is becoming a hub for a larger and larger collection of IoT devices. For builders and homeowners, knowing how materials interact with networking gear is a vital step to creating a strong, fast, and reliable IoT network hub.

Smarter Homes, More Devices

When we think of internet-enabled devices in a home, we typically think of a phone, tablet, or TV. However, other categories of home devices are increasingly becoming internet enabled. Lights, fans, HVAC systems, security systems, and appliances, are making homes smarter and more efficient, but these devices are also utilizing the limited home Wi-Fi network.

As IoT devices continue to pile onto the home network, it is vital now more than ever for homes to be equipped with a Structured Media[™] Enclosure

which not only protects and organizes the home network, but also maintains the home network's maximum network strength and reach.

Limited Network Potential

Common home building materials set the home network up to be relatively unburdened, in comparison to commercial constructions. Though home constructions tend to use little of the most powerful Wi-Fi blocking materials, it is important to be aware of where dense materials like concrete and metal might be blocking signal.



With traditional media center enclosures, the metal doors at the front of the enclosure absorb Wi-Fi signals, limiting signal strength and reach. **"As we've seen industry-wide, customers who install a Wi-Fi router inside a metal enclosure will have reduced signal coverage,"** said John Seger, principal technical specialist at Leviton Network Solutions. Slowing the home's network speeds at the source is obviously a limiting factor to a fast and reliable network, especially when this network is taxed by additional IoT devices in the smart home.





A Better Solution

The Wireless Structured Media[™] Center (WSMC) from Leviton is an ideal solution as a focal point for the network hardware and connectivity smart homes require, while maintaining network strength. The plastic door on the WSMC allows for stronger signal propagation, enabling robust wireless performance. Plastic, specifically plastics that do not block UV, are virtually invisible to Wi-Fi signals. **"Users who simply replace the metal door with the WSMC's plastic door, see increased range and potentially increased speed,"** said Seger.

But the plastic door on the WSMC doesn't just improve Wi-Fi speeds by removing a metal barrier, the enclosure also allows active gear to perform better.

The WSMC's plastic door is designed with specially engineered vents to create "Tri-Plane Heat Dissipation." This design improves airflow, cooling active equipment by as much as 40 percent more than a traditional vented metal door. When active gear runs cooler, it runs more efficiently.

Ultimately, the Wireless Structured Media[™] Center is a tool developers can use to stay competitive in the smart home marketplace. For more information, please visit **Leviton.com/WirelessSMC**.

