

Wi-Fi HaLow: the next growth engine in IoT

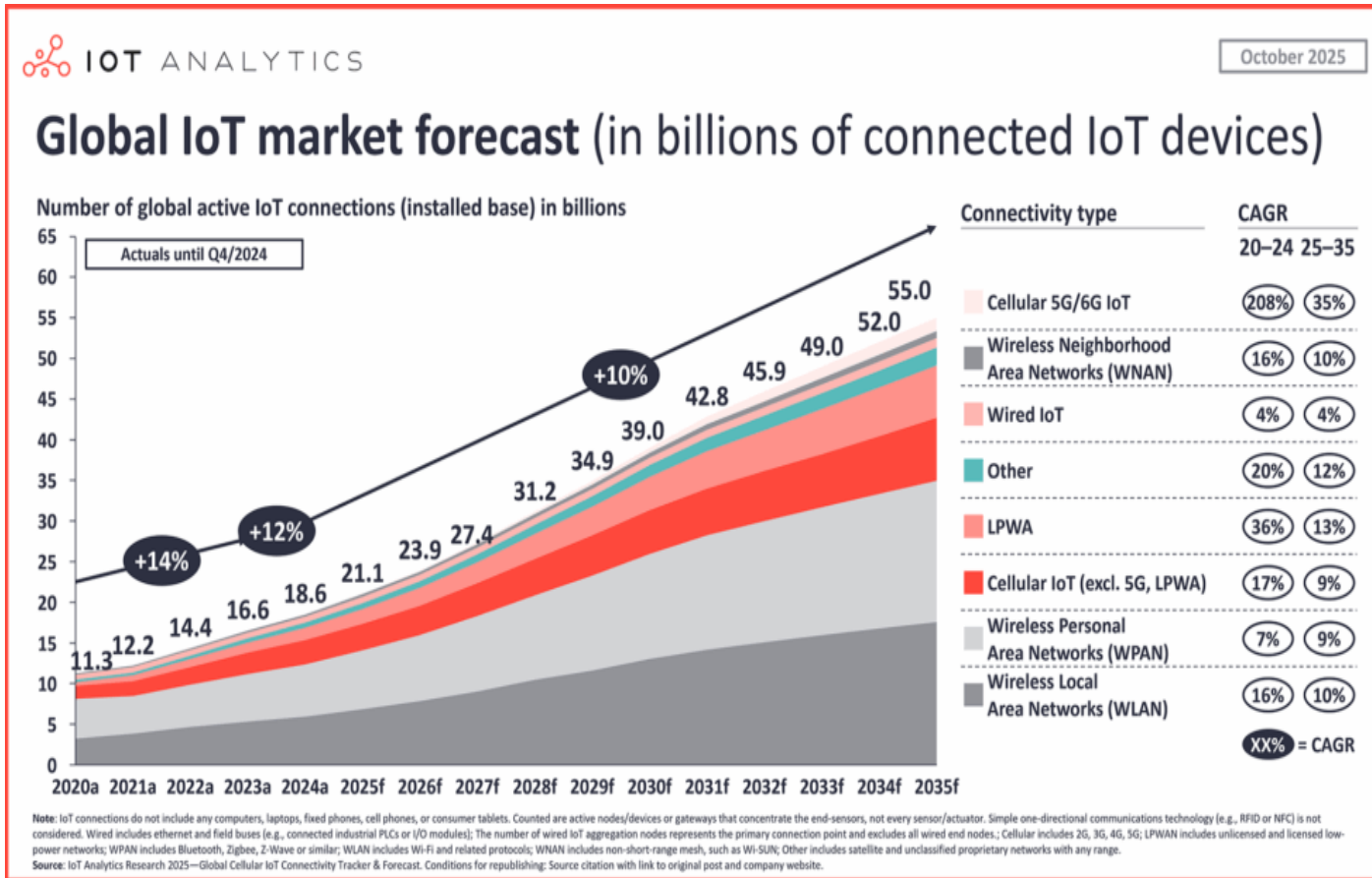


Jerry Huang

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June 2026, Computex 2026

Wi-Fi Market Share in IoT

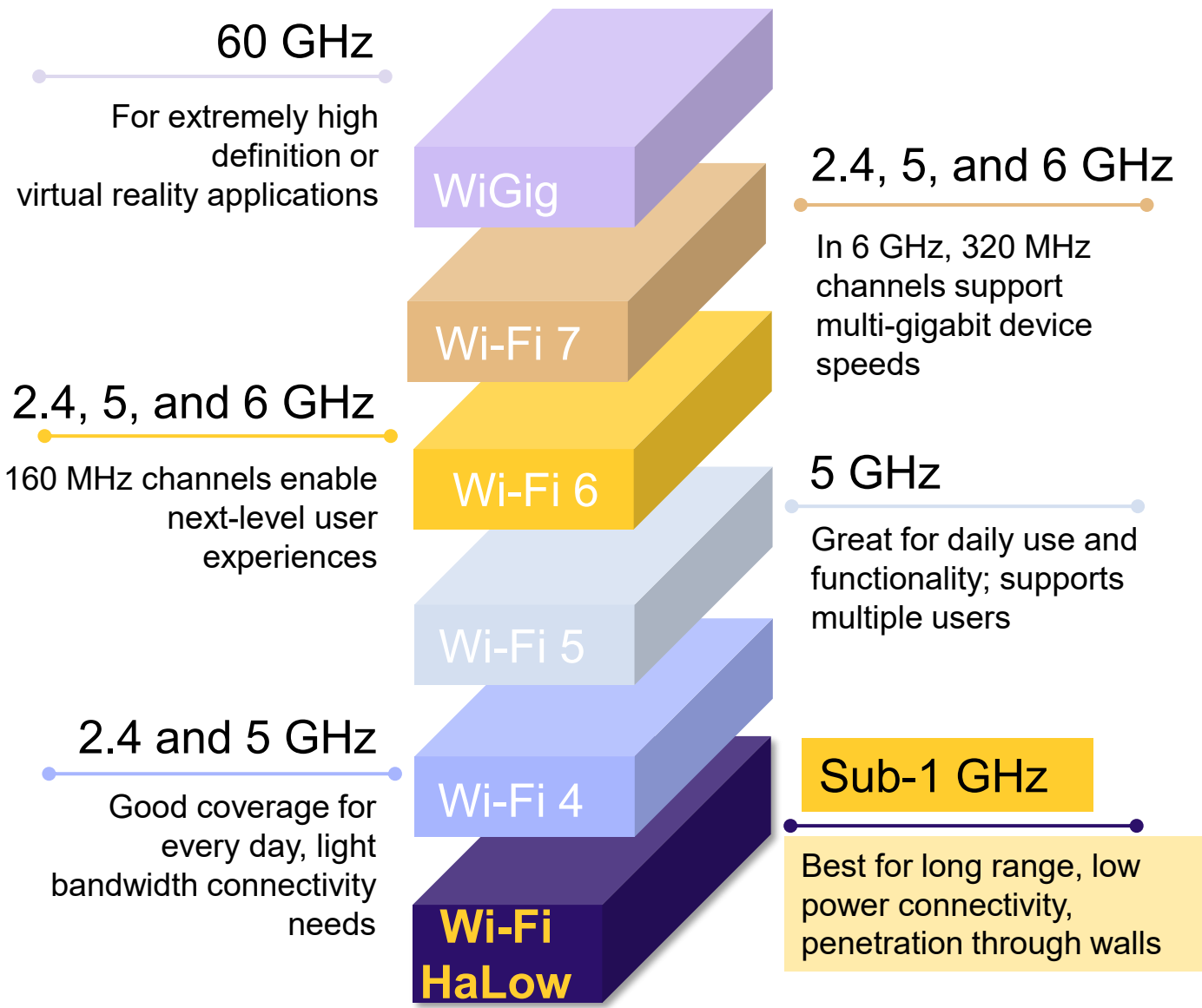


IoT Analytics



Proprietary | © Wi-Fi Alliance

Wi-Fi supports IoT across multiple use cases and environments



Designed with IoT in mind

Wi-Fi HaLow addresses unique needs of IoT devices:

- Long range: approx. 1 km
- Multi-vendor interoperability
- Penetration through walls
- Easy setup without disrupting existing Wi-Fi networks
- Supports coin cell battery devices for months (or years)
- No need for proprietary hubs or gateways



100M

Wi-Fi HaLow devices
predicted by 2029

Source: ABI Research, 2024

8K

Devices supported by a
single Wi-Fi HaLow AP



Wi-Fi HaLow use cases



Smart homes and buildings



Industrial automation control



Industrial IoT



Connected agriculture



Healthcare devices



Smart cities

Wi-Fi HaLow for commercial use

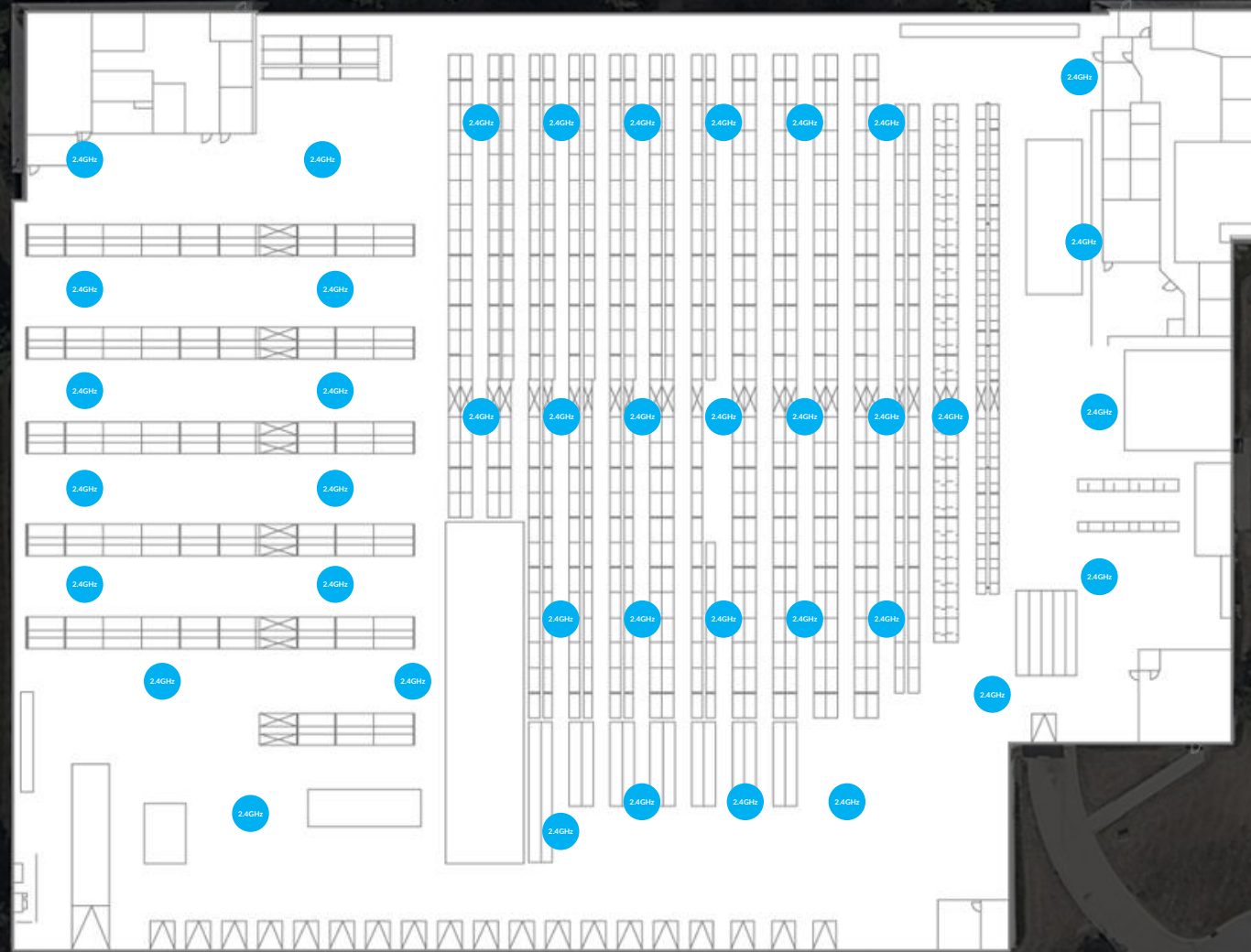
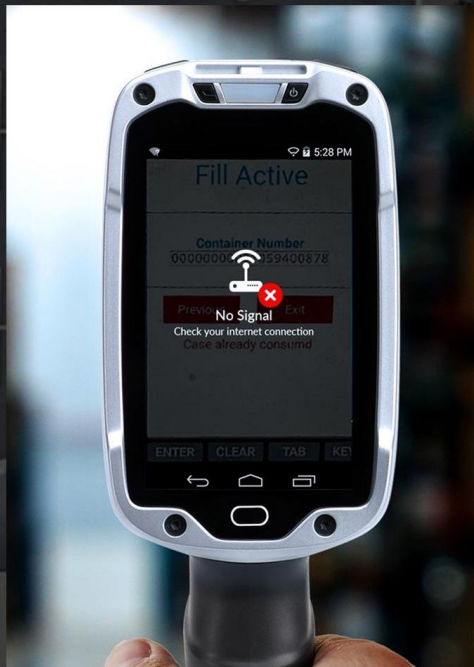
Current 40x Wi-Fi 6 access points required for indoor coverage

Poor signal and dropouts



Internal Coverage – 2.4 GHz

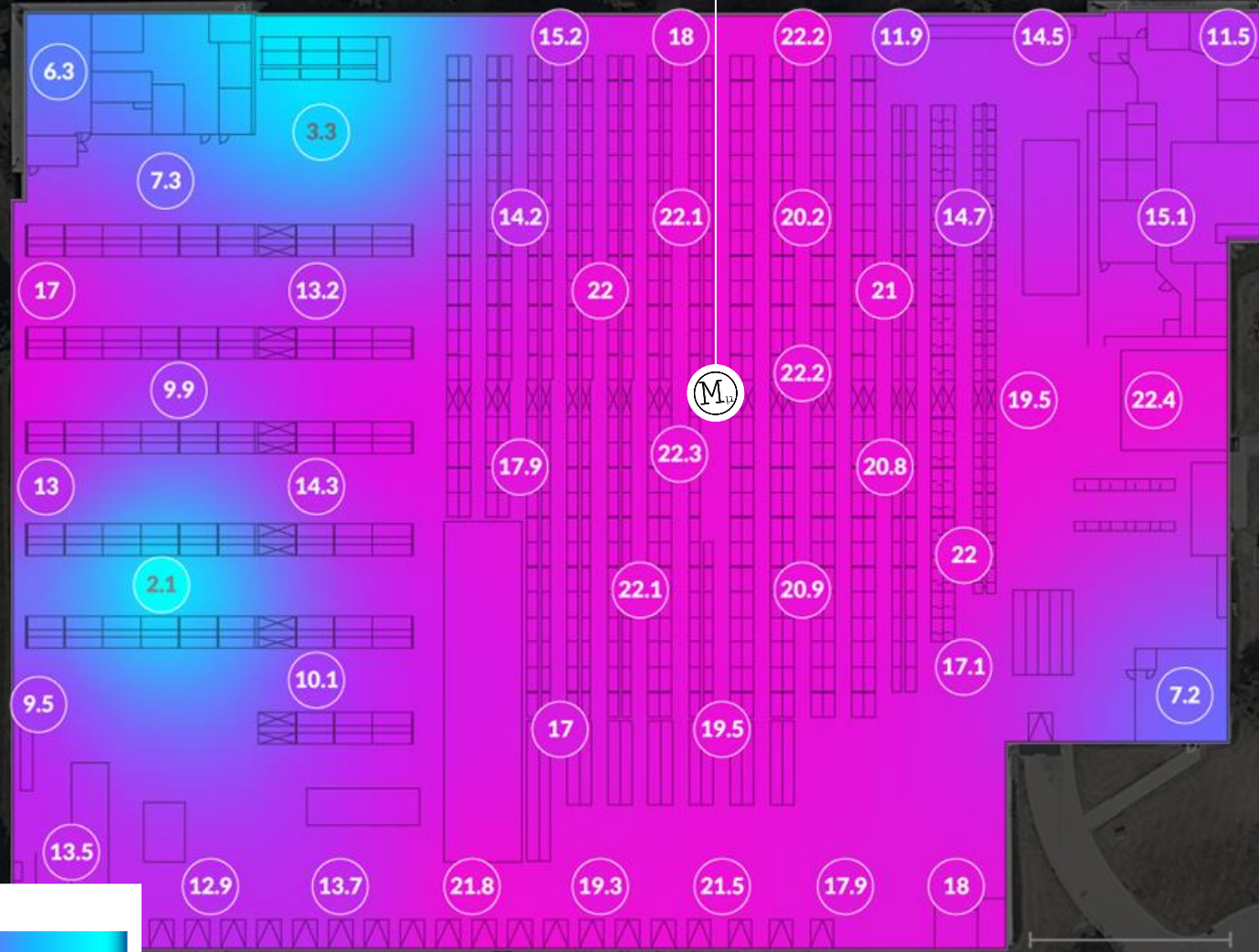
Poor and unreliable connectivity with 40x 2.4GHz APs



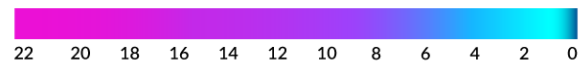
Internal Coverage – Wi-Fi HaLow

Morse Micro Wi-Fi HaLow Access Point

One Morse Micro Wi-Fi HaLow AP covered the entire warehouse with a strong reliable signal



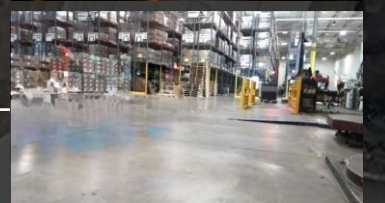
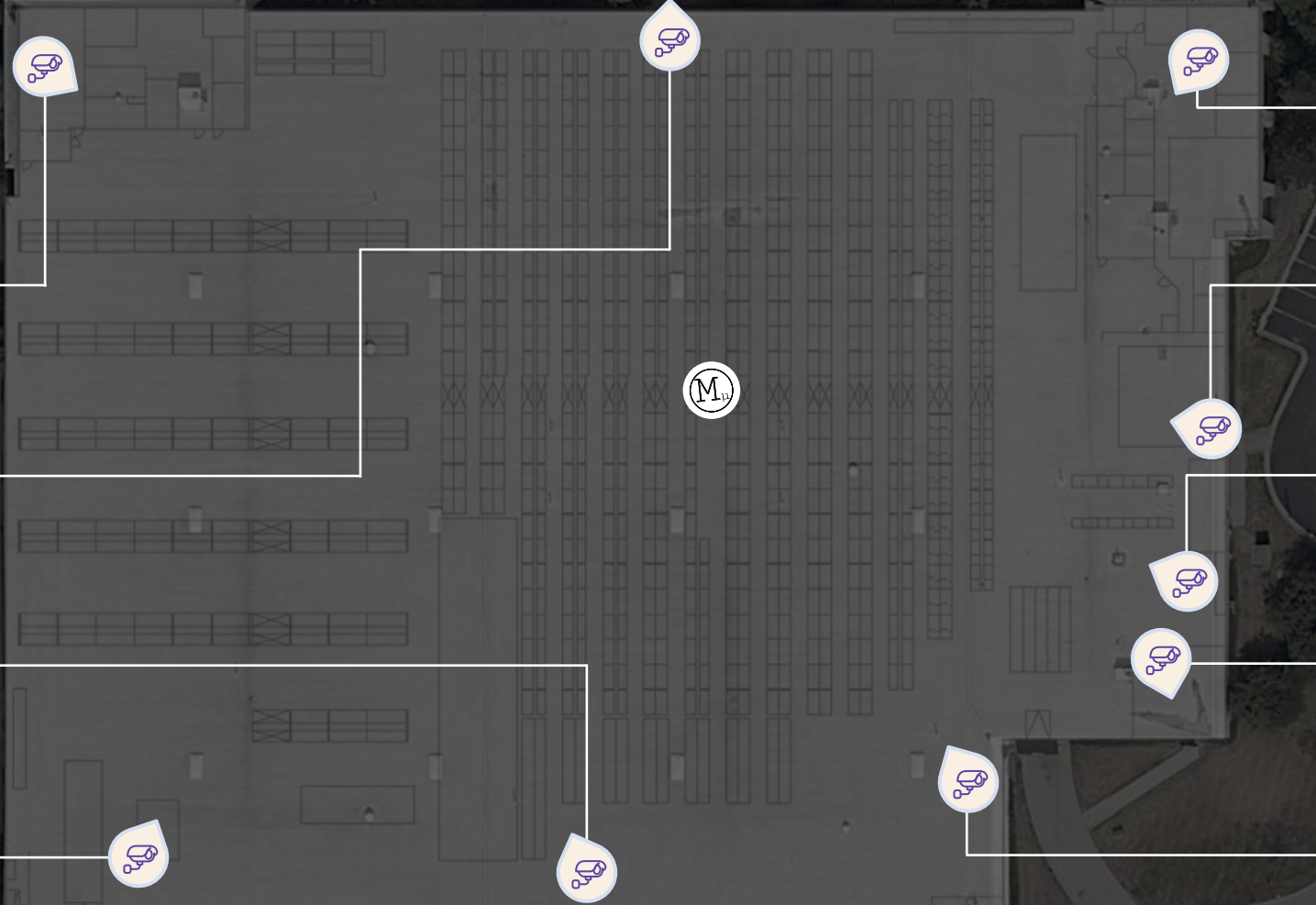
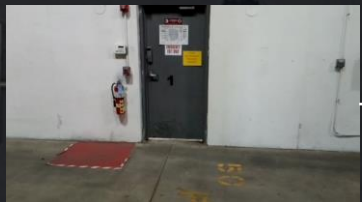
UDP uplink throughput – Mbps



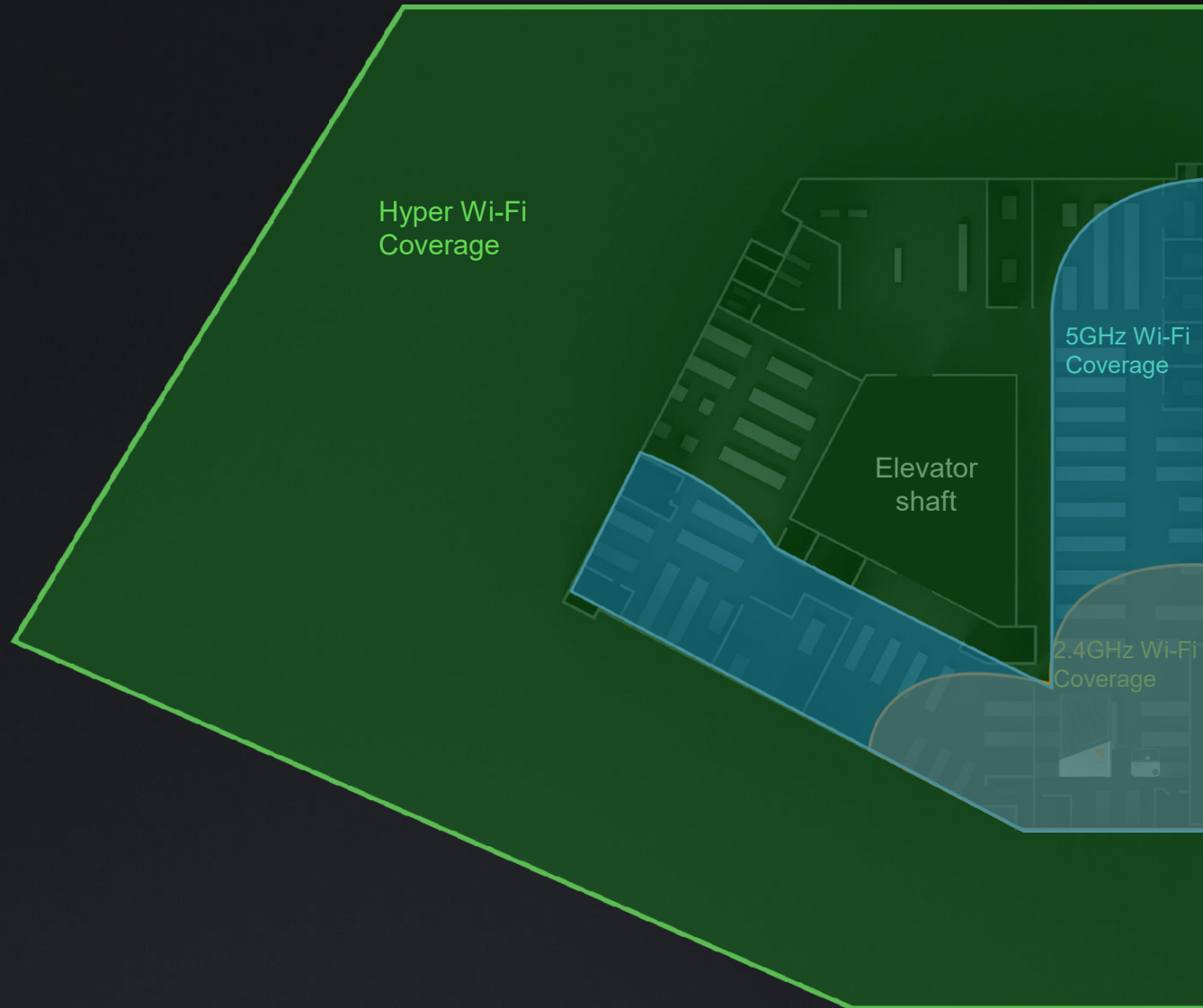
20m

9 streaming cameras

Enough throughput for 9 continuously streaming cameras



Real-world test data ...



12000m²

Indoor office environment

Average speed 1.97Mbps

Provides stable support for real-time business applications

Further, but more stable



Printers connected to 2.4G Wi-Fi



Printers connected to Hyper Wi-Fi

24 hours continuous stress test

With **Hyper Wi-Fi**

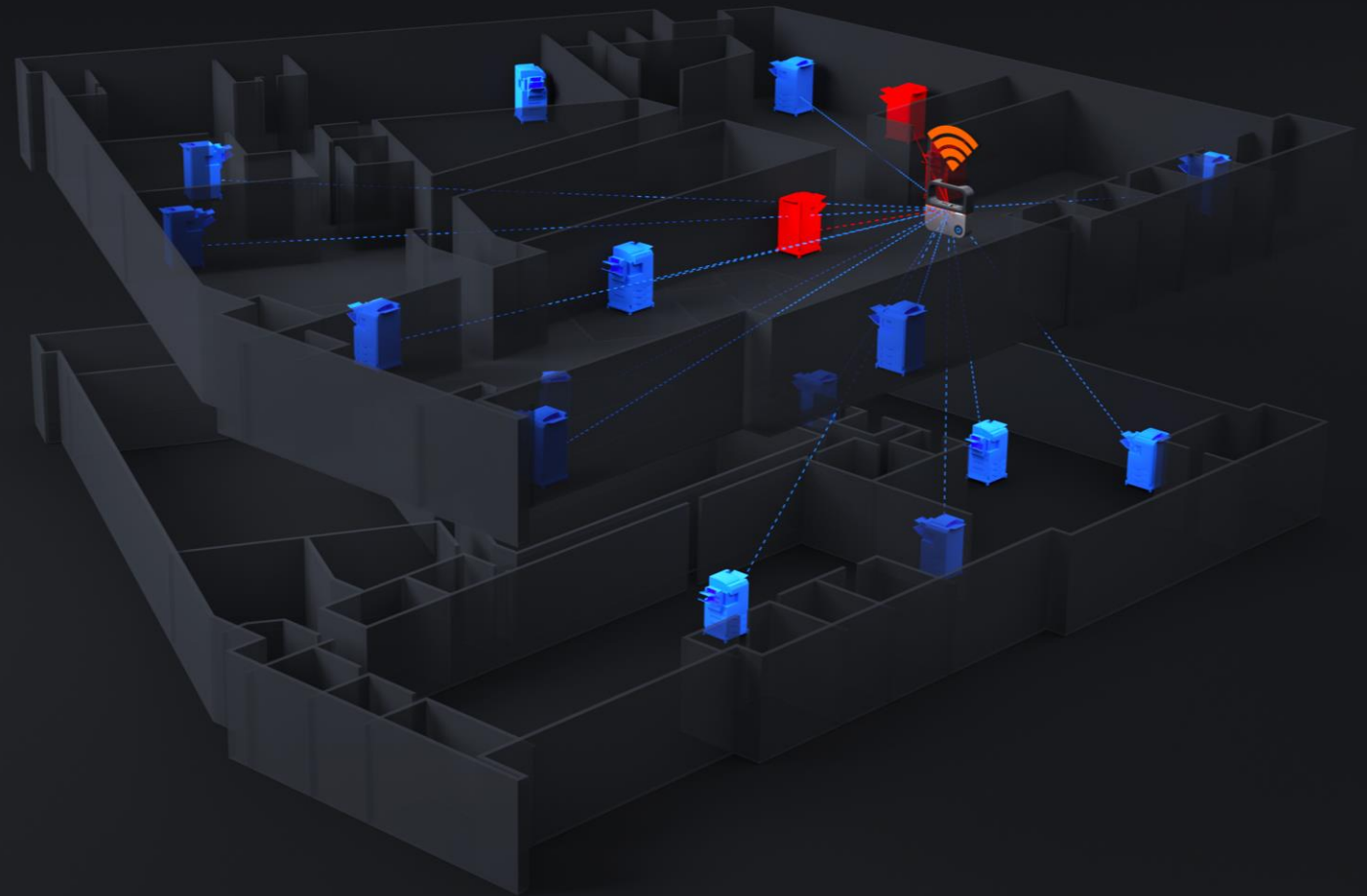
the order loss rate is **0%**

and the average delay is about **200ms**

With **2.4G Wi-Fi**

the order loss rate is as high as **3.29%**

and the average delay is more than **850ms**



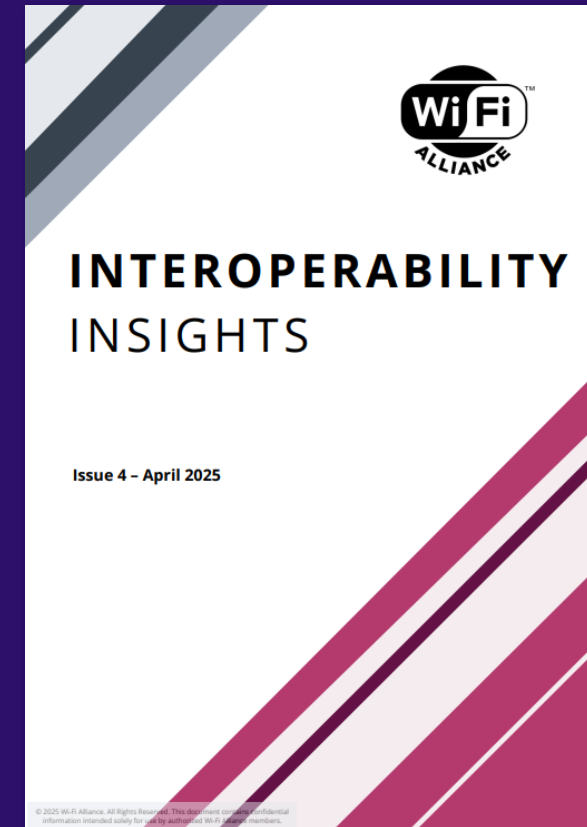
Wi-Fi HaLow amplifies product portfolios

- **Low power** Wi-Fi technology with IoT in mind
- **High data rates**, potentially reaching tens of megabits per second (Mbps).
- **Native IP** compatibility for smart home and city applications
- **Long range** of up to 1 km indoors and several kms outdoors
- **Strong signal penetration** at home and in urban and industrial environments (sub-1 GHz)
- **Wide application** support smart home, industrial automation and control, real-time responsiveness, and high bandwidth applications



Wi-Fi IoT and Wi-Fi HaLow Interop Event

- Focused on basic connectivity and certification readiness
- The event target to take place on 2nd half of 2026 in Asia
- Ensured connectivity for Wi-Fi HaLow devices on day-to-day Wi-Fi network and applications
- Beyond testing, the event offered a roundtable discussion allowing companies interested in Wi-Fi HaLow to exchange ideas.



Join and collaborate

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