

dp smart

5G Mobile Router Makes Latency-free, High-definition Livestreaming Possible at Crowded Events

Customer at a glance



Customer Namedp smart



Industry Multimedia



Location Taipei, Taiwan



Customer Background

dp smart specializes in digital image processing technology and develops 360-degree panoramic livestreaming cameras for online and broadcast applications. Its real-time in-camera stitching-processing technology delivers efficient results without the need for post-processing. This enables one-click broadcast and 4K live streaming to Facebook, YouTube, and other platforms without an additional mobile or computer connection.

"It's challenging for us to livestream in a high-density environment like an exhibition hall with thousands of concurrent users simultaneously connecting to the internet. Zyxel's NR5101 router features high-speed, low-latency 5G technology that significantly improves video lag and interruption issues, making it ideal for us to deliver 360-degree surround views."

Kevin Chiang Founder & CEO, dp smart

Summary

With the vision of empowering everyone to share their memories and create new ones, dp smart had already overcome post-processing difficulties to offer one-click 4K livestreaming. However, insufficient bandwidth was keeping them from fully realizing the potential of their innovative technology. Livestreaming consumes tremendous upload bandwidth, especially for 4K or 8K ultra HD video. The company first tried using 4G LTE connections. But even after six months of tinkering, connection speeds were still slow and latency was a big problem, particularly in high-density environments like exhibitions and crowded events, where thousands of people may simultaneously share the same network.

"Fast and reliable wireless connectivity is essential for us," dp smart founder & CEO Kevin Chiang explains. His team got to search for alternatives—and found the answer in Zyxel's NR5101 mobile router. Its high speeds and low latency provide the capacity for 360-degree cameras to livestream 4K panoramic videos without lag even in the most crowded venues, Chiang says. Citing a particularly challenging case, he adds, "The router even helped us overcome the high-density environments at crowded events, including the 2022 Smart City Summit & Expo and the Christmasland event in New Taipei." Now with the NR5101, the company is confident of livestreaming 4K videos anywhere and delivering better viewing experiences for any connected devices.

Challenges

- Update existing 4G infrastructure unable to support continuous live streaming in high-density, interference-laden environments
- Find a hassle-free networking solution that can be quickly and easily deployed in any location

Benefits

- Seamless 5G connectivity provides sufficient bandwidth and low latency to deliver smooth HD livestreaming even in locations with thousands of concurrent users
- Stable, high-speed network ensures optimized user experience with no concerns about internet interruption or dropouts
- Reduced system installation complexity makes the network suitable for mobile use

Solutions

• Nebula NR5101 5G NR Indoor Router