



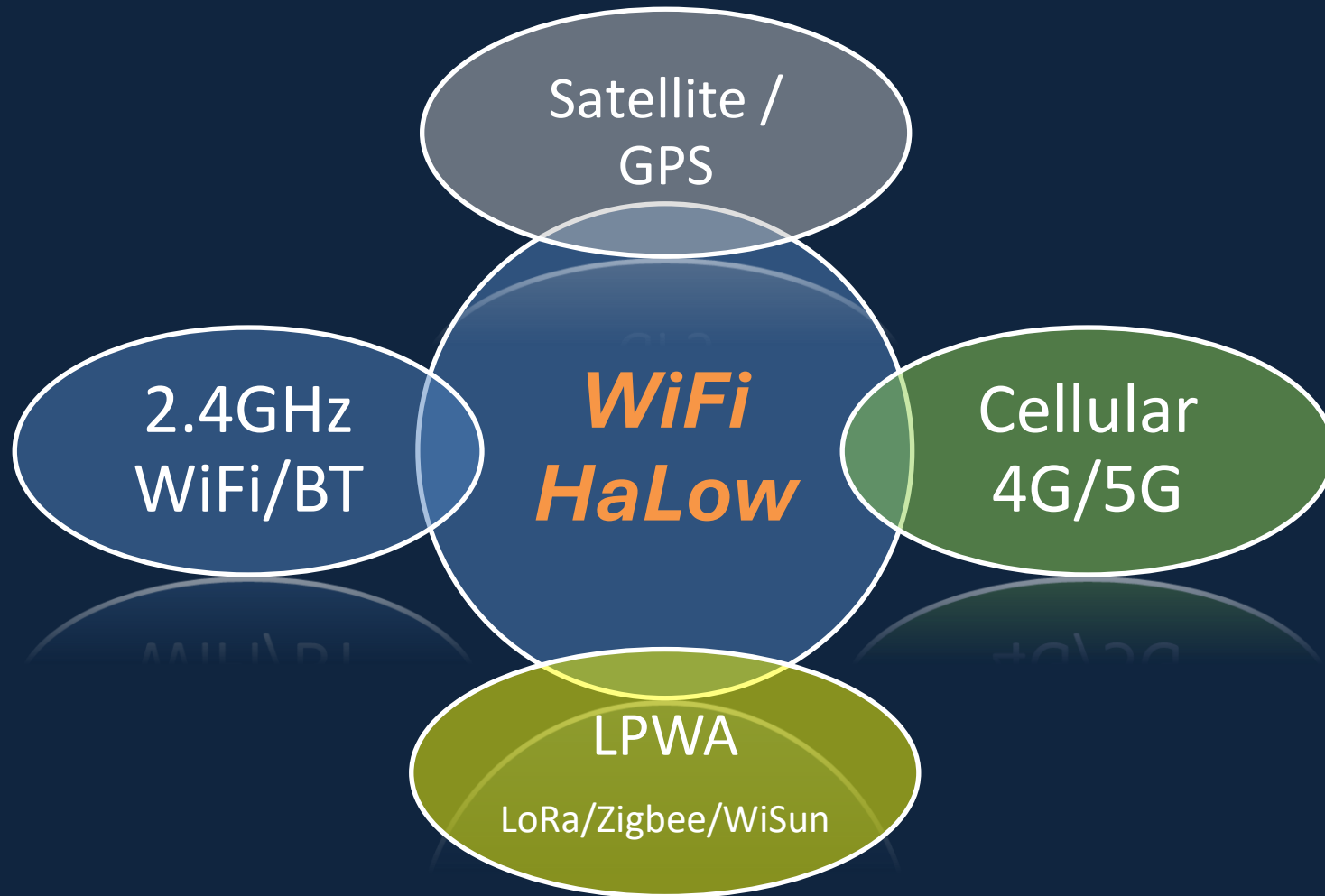
802.11ah – WiFi HaLow

June 3rd, 2026

Frank C. Lin

VP of Global Sales & Marketing

Seamless Connectivity – WiFi HaLow Value Proposition **NEWRACOM**



Cellular:

Alternative network cost reduction coverage expansion (SIM-less). Increase ARPU & applications expansion.

WiFi & Bluetooth:

Improve signal penetration and range under weak signal environments – extended remote data access

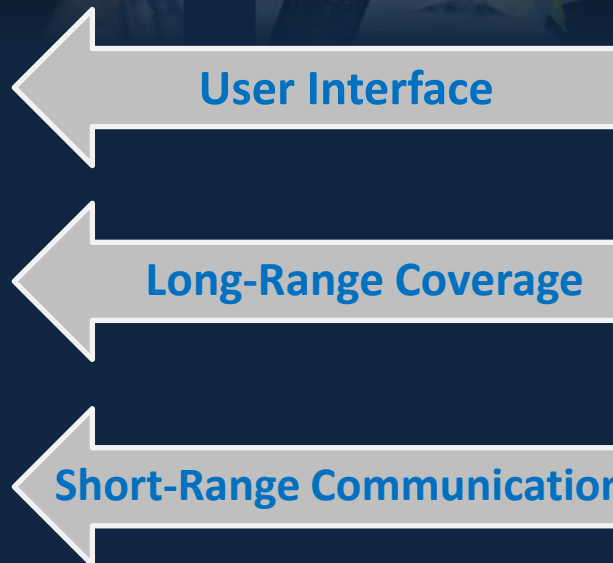
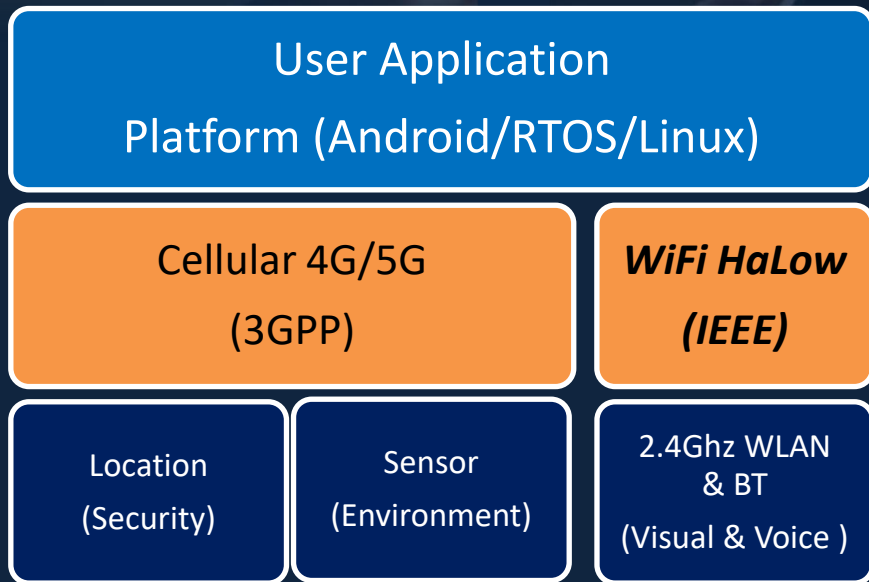
LPWA:

Increase throughput & data capacity with real-time full-duplex notification

Satellite & GPS:

Location sharing in rural areas ground level local wireless network with mobility

Intelligent Connectivity for the Mass-Market



- Paradigm shift to **“AIoT for Individual”**
- Work, leisure or on the move!
- Always connected
- **Anywhere Anytime**
- **Ultra low power & smallest size** are two essential factors
- **Connected by NEWRACOM NRC7394 System on Chip**

Mobile Phone – WiFi HaLow Ready



NEWRACOM NRC7394: Market proven & only supplier with Android platform integration experience
- Three commercial ready Android mobile phones ready for mass market



URL: <https://www.kyocera.co.jp/prdct/telecom/office/phone/lineup/toughness/kc-s704/?kcnews>



URL: <https://www.sunmi.com/en/m3/>



Schedule: Q4 2026

Industry First- Edge AI-Centric Visual Sensory Detection (VSD) Surveillance Solution



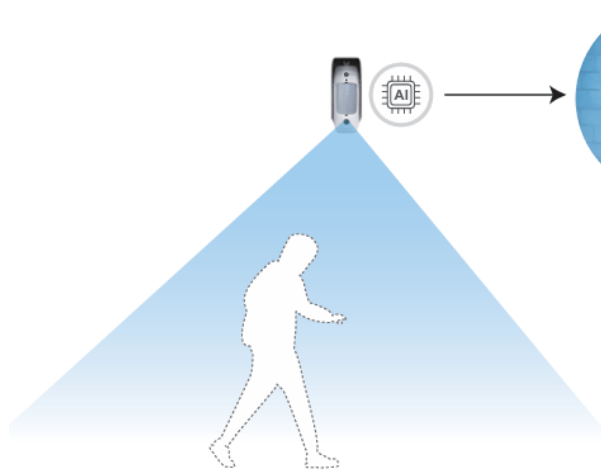
Power-Efficient Operation

Uses low-power SF1/F1 protocol for daily operation and switches to Wi-Fi HaLow only during image capture, optimizing battery efficiency.



AI Detection for Enhanced Alarm Monitoring

The AI can determine human presence in images, enabling the Central Monitoring Station to prioritize alarm events efficiently and enhance response times.



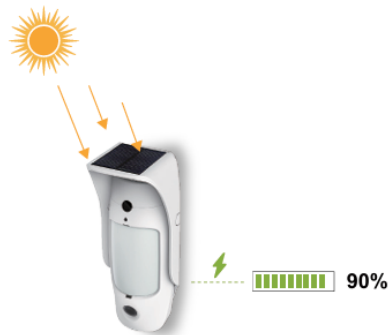
Battery-Operated Design

PIR motion sensor camera is fully battery-operated for flexible, wire-free installation.



Integrated Solar Power System (Solar models only)

Harnesses solar energy to continuously charge the built-in battery to ensure long-term functionality for remote outdoor locations, reducing maintenance.



OTA Firmware Update

Supports Over-the-Air firmware updates, enabling remote upgrades and system enhancements without on-site maintenance.



PIR Camera Success Story – Connected by WiFi HaLow



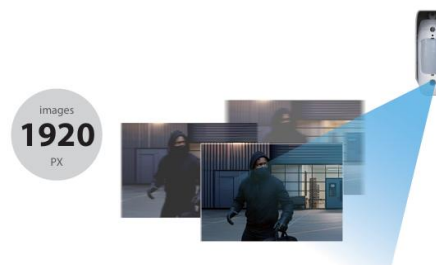
VST-897EX-HaLow Series Outdoor PIR Motion Sensor Camera

- Wi-Fi HaLow enables much faster alarm verification as fast as 1.6 secs (HD)
- Supports image quality up to Full HD as well as live video streaming
- Fully battery-operated for flexibility of application
- Infrared Technology improves anti-masking using over-the-lens detection method
- Integrated with solar power system (Solar models only)

Faster alarm verification



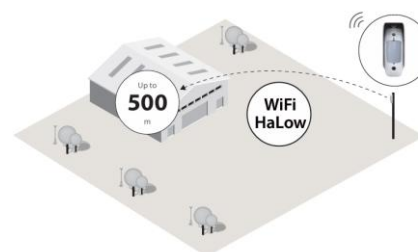
Full HD imaging



Live video streaming support



Extended Coverage



Wi-Fi HaLow module



Faster alarm verification



Full HD imaging



Live video streaming



Fully battery-operated



Over-the-lens anti-masking



AI Detection



Integrated solar power
(Solar models only)

PIR Camera Success Story – Connected by WiFi HaLow



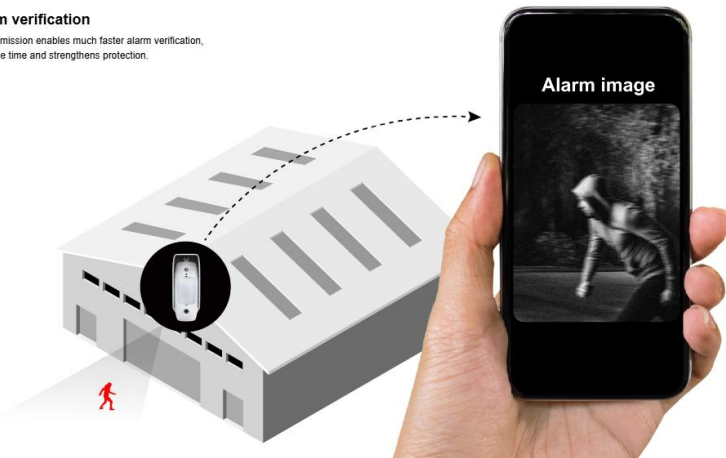
WiFi HaLow transmission

WiFi HaLow module, by operating on a low-power, long-range standard, deliver multiple benefits.

Faster alarm verification

Rapid image transmission enables much faster alarm verification, improving response time and strengthens protection.

1.6
Secs
For HD



Power-Efficient Operation

Uses low-power SF1/F1 protocol for daily operation and switches to WiFi HaLow only during image capture, optimizing battery efficiency.



Battery-Operated Design

PIR motion sensor camera is fully battery-operated for flexible, wire-free installation.



Extended Coverage

Uses the sub-1 GHz spectrum to achieve significantly greater transmission distances than conventional WiFi.

Up to
500
M

WiFi
HaLow



Integrated Solar Power System (Solar models only)

Harnesses solar energy to continuously charge the built-in battery to ensure long-term functionality for remote outdoor locations, reducing maintenance.



Your Global Wi-Fi HaLow Solution Partner

Complete Wi-Fi HaLow Solutions from Chipsets to Modules

NEWRACOM NRC series WiFi HaLow SoC (System on Chip)

Azurewave 802.11ah WiFi HaLow modules (AW-HM610)

muRata 802.11ah WiFi HaLow modules (Type 2HL)

TechWare 802.11ah M.2 system - module

Local Expertise for Faster Development and Deployment

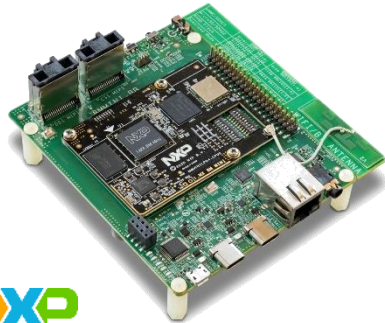
Our regional engineering teams accelerate Wi-Fi HaLow adoption through local technical support, design expertise, and deployment assistance.

Reliable Supply Chain for Scalable IoT Growth

With 50+ offices and 5 major distribution centers across APAC, we ensure reliable supply and scalable growth for your IoT business.

AVNET® Optimizing Your System Wireless Design for Success

ENVIRONMENT (i.MX8M + NRC7394)



NXP i.MX8M Mini EVK

Kernel 6.1.55, Device tree file: DTB

Driver: nrc.ko

NEWRACOM NRC7394 EVK

Interface: SPI

Performance Result:

Wireless throughput test ~10Mbps

Driver/Performance Optimization: Yao FENG

Industry First – Intelligent IoT is Here

- Edge AI system solution connected by **NEWRACOM**
- Dedicated Neural Processing Unit (NPU)

AVNET® - Completed NRC7394 driver porting and system integration. Verified operation on both NXP EVK platforms.

ENVIRONMENT (i.MX93 + NRC7394)



NXP i.MX93 EVK

Kernel 6.1.55, Device tree file: DTB

Driver: nrc.ko

NEWRACOM NRC7394 EVK

Interface: SPI

Performance Result:

Wireless throughput test ~10Mbps

Driver/Performance Optimization: Yao FENG

Time to Market for Customers and Partners

- Significantly reduce customer integration and validation effort
- Lower technical risk when adopting integrated Wi-Fi HaLow solutions

AVNET CAN SUPPORT YOU

Your Success Is Our Mission
Let's Build the Future of Wi-Fi HaLow Together

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NEWRACOM



AzureWave

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INNOVATOR IN ELECTRONICS

NXP



RENESAS

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**Thank
You**

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