

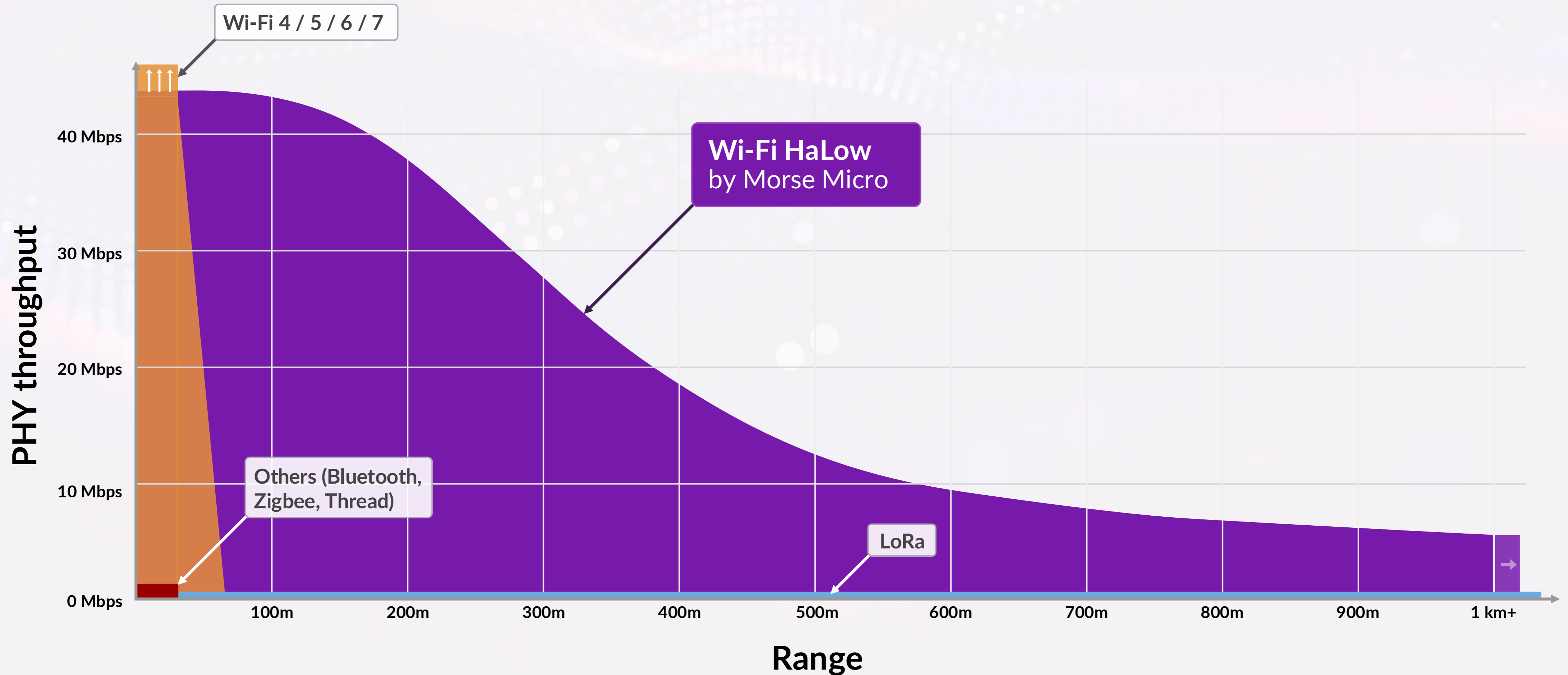


Morse Micro  
reaching farther™

# Wi-Fi HaLow: Enabling Intelligent Infrastructure outside the home



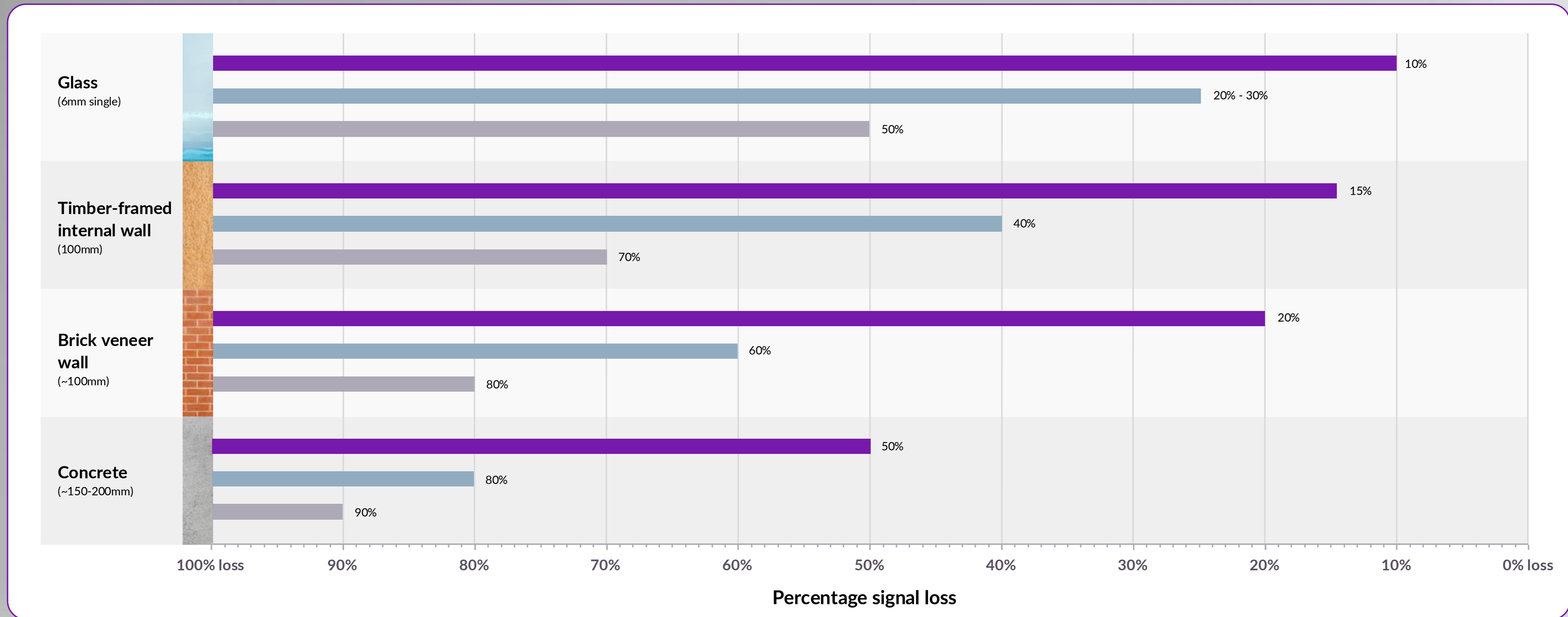
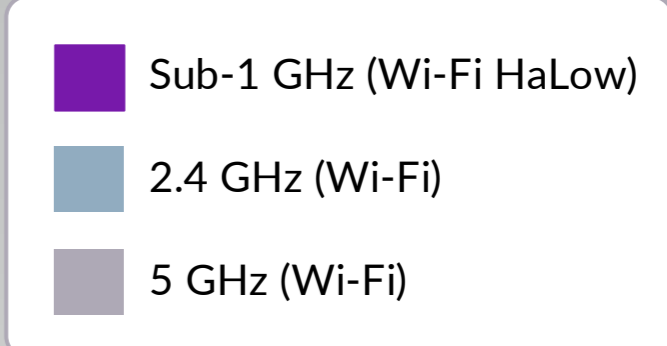
# Wi-Fi HaLow enables a new generation of intelligent infrastructure



# Wi-Fi HaLow: “The Utility Lane” making residential infrastructure safe, reliable and truly smart!



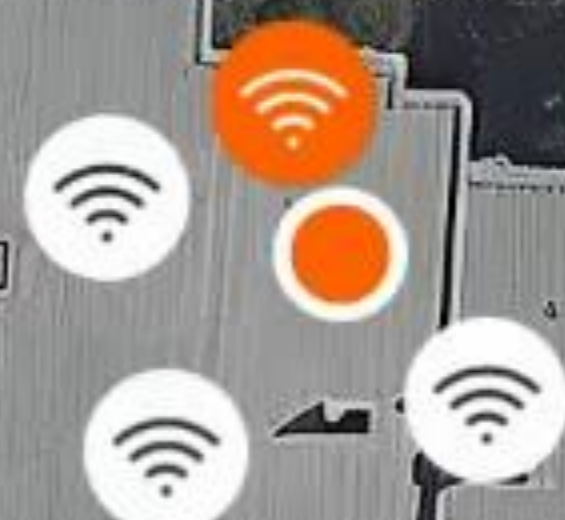
# Signal penetration - percentage lost

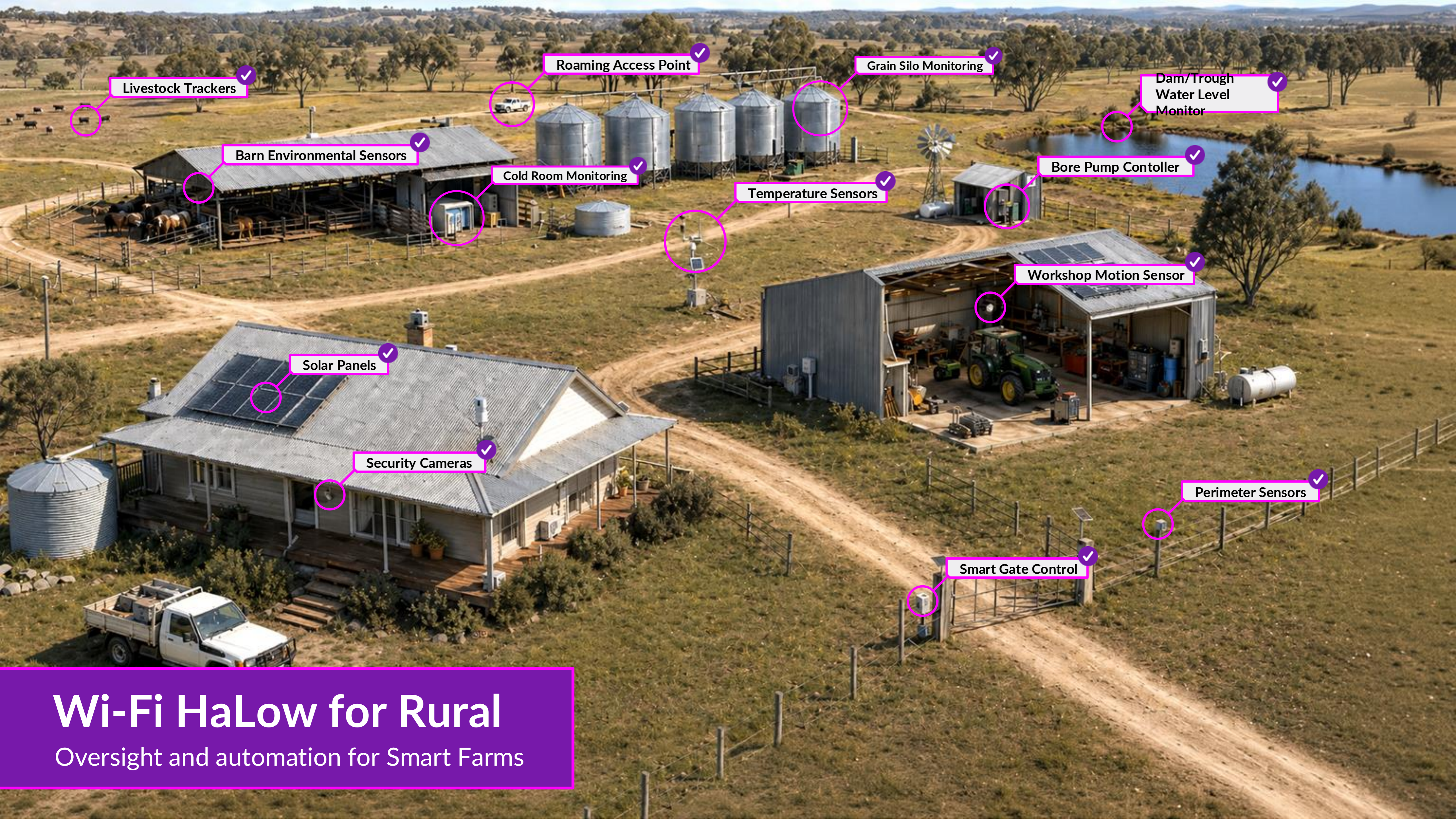


HaLowLink



Eero Pro 1





# Wi-Fi HaLow for Rural

Oversight and automation for Smart Farms

# Morse Micro's MM8108 SoC

Fastest, smallest, lowest power and longest-range Wi-Fi HaLow chip currently available

- **Channel bandwidth options of 1/2/4/8 MHz**
- **802.11ah OFDM PHY supporting MCS0-10**
  - Single-stream max. data rate at 8MHz with 256-QAM of 43.3 Mbps
- **Radio supporting Sub-1 GHz frequency bands**
- **Frequency range: 850-950 MHz**
  - Max. output power: 26 dBm
  - Extremely power efficient transmitter: 37%. 400mW (26dBm) output from 1080mW input
  - Integrated LNA with noise figure of < 4dB
- **Integrated Power Management Unit (PMU) for optimised power consumption and low BOM**
- **WFA HaLow certification**
  - Support for STA and AP roles
  - AP with SoftMAC, STA with SoftMAC or FullMAC
- **Supported host interfaces**
  - USB 2.0 High-Speed at 480Mbps
  - SPI 1-bit mode at 50MHz
  - SDIO 2.0 4-bit mode at 50MHz
- **System throughput up to 30 Mbps**
- **Low power**
  - DTIM3 of 715uW (217uA at VBAT=3.3V)
  - DTIM10 of 255uW (77uA at VBAT=3.3V)



MORSE MICRO SOLUTIONS

# High-Power, Longer-Range

Morse Micro's MM8108-M20 is our latest release high-power module

## High-power external PA

Max 28.5 dBm (700 mW)

## Compact size

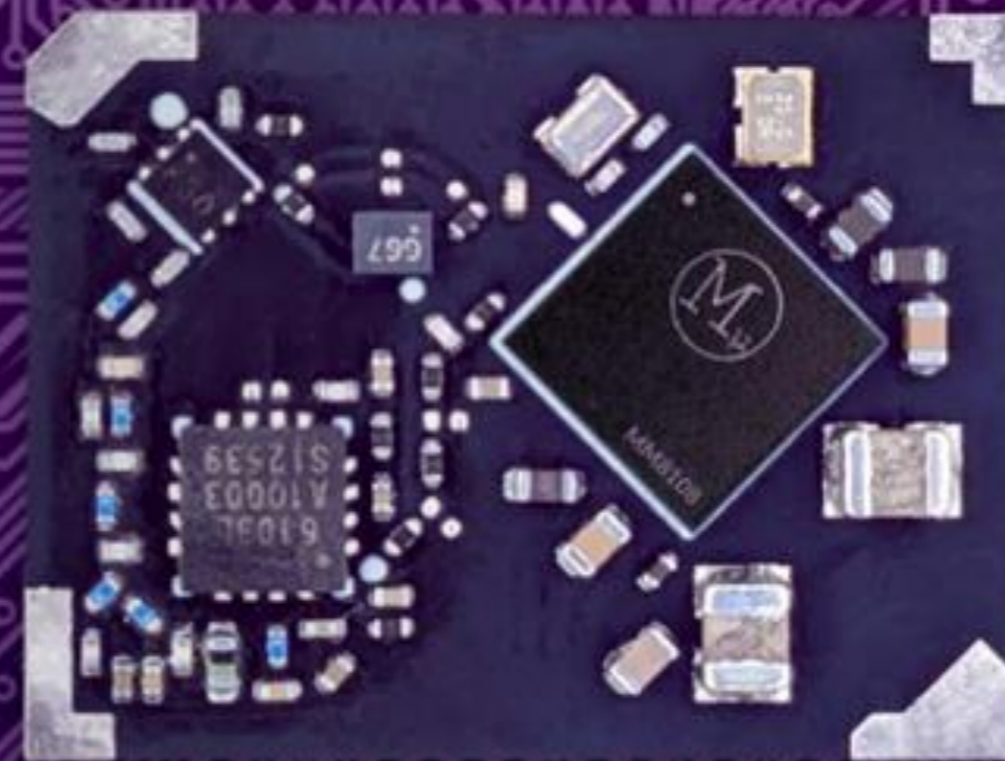
18.5 × 14 × 3.0 mm, 51-pin LGA

## Maximising performance

Compared to our standard module with 23 dBm output power, the M20 has an increase in 5.5 dBm

## Longer range

Increased output power enhances achievable range to as much as 1.45x the distance of the standard module



FC IC