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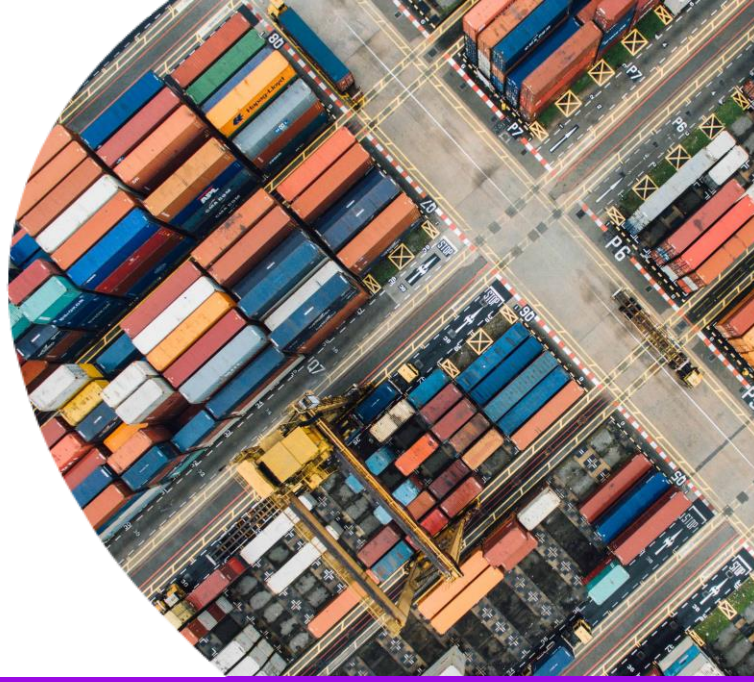
NB-IoT & LTE-M

MASSIVE IOT



Combine Low-Power-Wide-Area economies of scale with the security and reliability of the LTE standard for enterprise-grade IoT connectivity.

Narrowband IoT (NB-IoT) is a Low Power Wide Area (LPWA) technology that provides cost efficiency on a massive scale via low-cost, low-power and low-data connectivity. NB-IoT reaches further and penetrates deeper than traditional IoT connectivity. This delivers greater reach for devices in remote areas, locations with high connection density and devices placed deep indoor or underground.

NB-IoT™

LTE-M hits a sweet spot in terms of data speed, power efficiency (battery life), and coverage. Supporting data speeds up to 1Mbps means LTE-M is flexible enough for functions that involve low to standard resolution video and voice as well as applications requiring moderate data demand monitoring and/or control. LTE-M is ideal for mobile use cases, because it handles hand-over between cell towers much like high-speed LTE.

LTE-M

A global standard
Mobile operators around the world have chosen NB-IoT and LTE-M as the standards for LPWA. This gives you the confidence of knowing you are investing in a technology with a future.

Lower data = lower costs
For applications that don't require a lot of data, why pay for it? NB-IoT it sends small amounts of data at set time intervals. And both LTE-M and NB-IoT can sleep for extended periods of time. And due to mass adoption, module costs are in freefall too.

Deep & broad reach
NB-IoT and LTE-M can go places other technologies can't. They penetrate deep inside buildings and under the ground. Both support enhanced signal coverage. And because they connects sensors directly to the mobile network, and you don't need additional gateways.

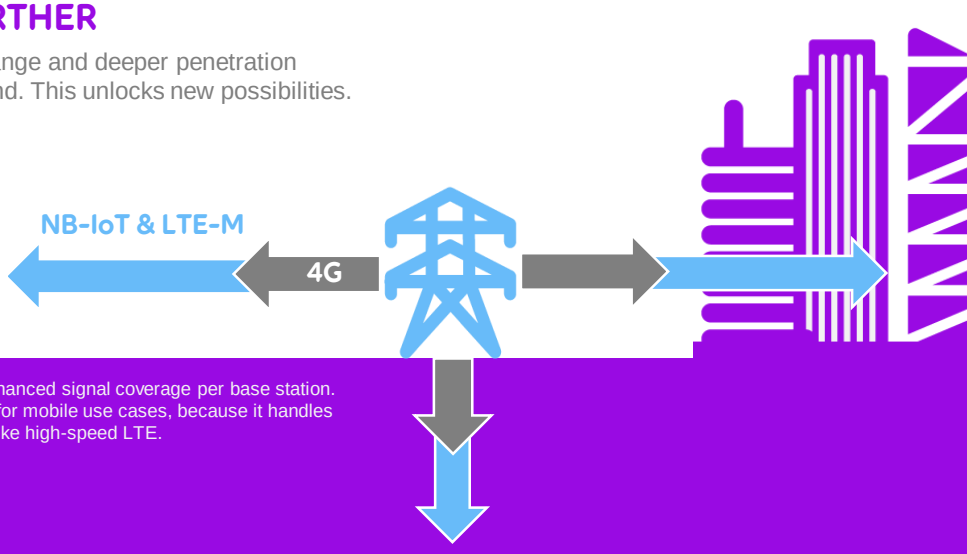
Long battery life
Batteries may be cheap, but replacing them isn't. NB-IoT & LTE-M are optimised for low power usage, which means 10 year battery life is now a reality. It all depends how you want to use it.

Dedicated spectrum
NB-IoT & LTE-M have a clear advantage over proprietary technologies that rely on shared spectrum. As the number of connected things increases, so will interference. In shared spectrum, this will increasingly require data to be re-sent – which will not just affect performance, it will also deplete batteries a lot faster than some of the promises flying around. With dedicated spectrum, you're in the clear.

NB-IoT & LTE-M are the technologies the GSMA has recommended as the 'massive' component of the official 5G standard. They build on the success of the established LTE standard and inherit its strong security features. This includes one-SIM authentication to mutually authenticate both network and device generated session keys for encrypting traffic between device and network. You could say it's an evolution of an evolution.

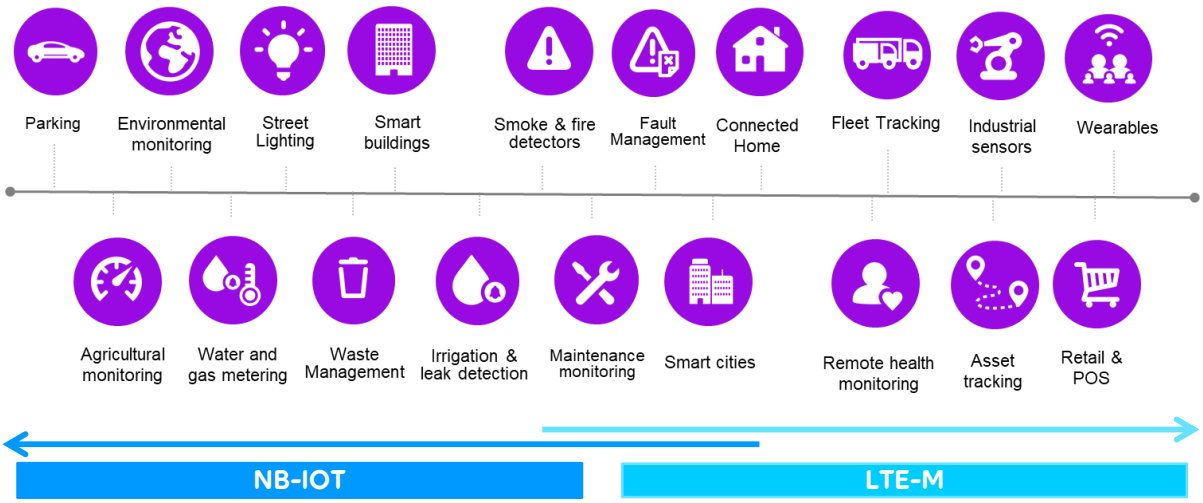
SEND LESS GO FURTHER

Extended coverage, longer range and deeper penetration through walls and underground. This unlocks new possibilities.



NB-IoT & LTE-M also both support enhanced signal coverage per base station. Compared to NB-IoT, LTE -M is ideal for mobile use cases, because it handles hand-over between cell towers much like high-speed LTE.

USE CASES



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