



Low Power

Low Power solutions from Wireless Logic provide the full range of low power cellular technologies enabling you to assess and select the right solution to meet the demands of your application and deployment plans.

Mobile network operators across the globe are building out highly secure and standards-based low power cellular networks to support massive deployments of smaller, energy-efficient sensor devices in Smart City, Healthcare, Agriculture, Transportation, Energy and Utilities and Environmental markets.

LPWAN enables longer battery life and removes the need for thermal management in devices. Combining that with smaller geometry SIM technology helps with miniaturisation and the reduction of device hardware costs.

NB-IoT, LTE Cat-M and LTE Cat-1 all have distinct advantages. Which technology is right for your application depends on a range of factors ranging from battery-life to time-to-market and total cost of ownership.



Find out more about Low Power solutions... >



Battery efficient

NB-IoT and LTE-M will provide the most energy efficient solution for applications that are battery or solar powered.



Cost effective

Lower hardware costs and longer battery life make LPWAN technologies a cost-effective wireless solution for devices.



Signal Penetration

NB-IoT and LTE-M operate in lower frequency bands and perform better for indoor or under-ground deployments.



Supports mobile and stationary applications

LTE-M and LTE Cat-1 support cell to cell roaming making them better for mobile applications. Cat-1 is more widely available globally.

Considerations for selecting the best LPWAN technology

➤ Local Deployments

If deploying in cities or regions then NB-IoT or LTE-M have the edge based on hardware costs and battery-life.

➤ Battery-life

If a 7-10 year battery life is really required, then NB-IoT or LTE-M are the best options but if not, LTE Cat 1 has clear advantages.

➤ Fragmented Coverage

NB-IoT and LTE-M both have fragmented coverage around the globe. In contrast, LTE Cat-1 is supported by all standard 4G networks.

➤ Only a single network per country

With NB-IoT and LTE-M there is typically only a single network in most countries. With LTE Cat-1 there are multiple networks per country.

➤ Total Cost of Ownership

The current NB-IoT and LTE-M landscape means there are limits on resilience and coverage which might mean a different SIM per country is needed. This can result in additional costs and management overheads. In contrast, LTE Cat 1 is a more universal solution.

➤ eSIM/iSIM Compatibility

NB-IoT isn't compatible with standard eSIM implementations. LTE-M and LTE Cat-1 are the best options if remote SIM provisioning is required. LTE Cat-1 provides greatest coverage and resilience.



Sectors benefitting from LPWAN...

NB-IoT is best for **high density deployments of simple stationary sensor devices** where **battery life is of primary importance**



LTE-M is best for **sensor devices with mobility** and **long battery life requirements**



LTE Cat-1 provides a more **global and resilient solution**.
It can be used when **battery life requirements are shorter**
or when **devices are mains powered**.





Things we connect...



How...



Our 'Built for IoT' network



Some of our partner networks



SIMPro



Connectivity Management



eSIM Profile Management



Secure Private Networking

Cloud and Enterprise Interconnects

Private IT Platforms

Cloud Service Providers



Internet Breakout

Talk to our IoT solution experts about Low Power solutions... >

Why Wireless Logic?



Global Coverage

Our 'built-for-IoT' network services and partnerships provide global coverage and local access into 50 major networks.



Flexible Solutions

Operator and technology agnostic solutions, with pricing that scales with your business.



SIMPro Platform

Connectivity management through a single, smart window.



Expert Local Support

20+ years' experience in helping our customers design, deploy and manage IoT applications.



Secure & Resilient

Private infrastructure in 15 major data centres transmitting data reliably from device to end-point

Contact us today...

to talk to an expert or get a quote

Call: 0330 056 3300 Email: hello@wirelesslogic.com Web: wirelesslogic.com
