

Highly secure IoT networks optimized to connect your IoT devices in most environments.



Expand your IoT solutions and connect devices with a highly secure, cost effective, reliable IoT network. The LPWA (low-power wide-area) networks, LTE-M and NB-IoT are designed and optimized for IoT solutions.

Connect your solutions on the network made for IoT

IoT wireless networks are evolving to help meet the needs of a wide variety of connected devices and services—from wearables, automotive, and residential to street lighting, utility meters, industrial

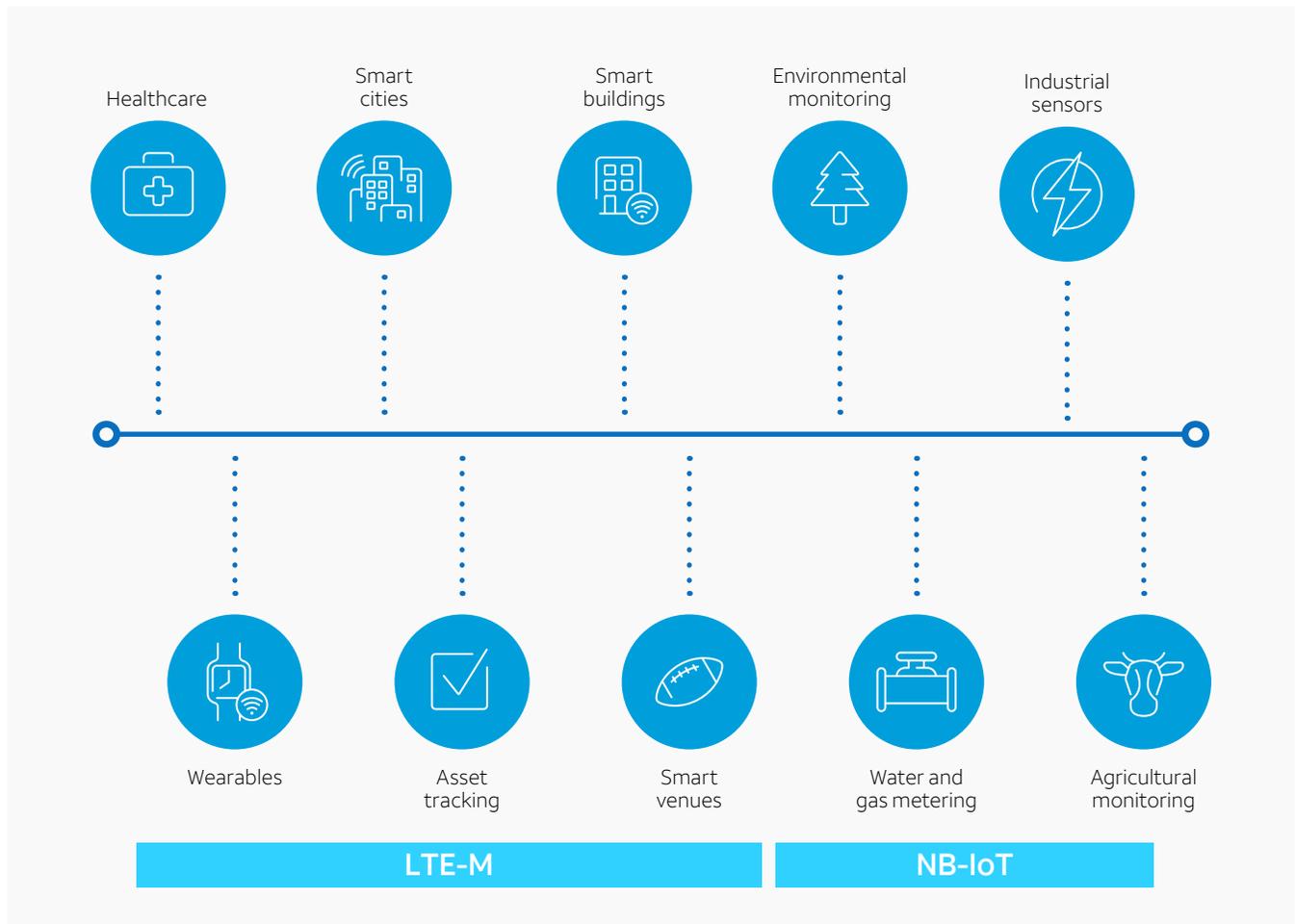
automation devices, and so much more. When making decisions on IoT system architectures, you want coverage (including good penetration in buildings and underground), long battery life, and lower costs of hardware. You also need a reliable, scalable network that offers nationwide coverage and carrier-grade security.

Features

- Better coverage underground and deep inside buildings than with traditional cellular
- Superior performance and carrier-grade security
- Power-saving mode and extended discontinuous reception to enable longer battery life (up to 10+ years)
- Economical chipset and module costs (under \$10)
- Licensed spectrum
- Mobile operator managed network based on 3GPP standards
- Coverage extension to achieve coverage in challenging environments

Now with LTE-M and NB-IoT you can get the highly secure benefits of cellular with optimized features designed specifically for IoT industries and applications, with a large coverage area across many markets.

LTE-M (LTE Cat-M1) and NB-IoT (Narrowband) are Low Power Wide Area (LPWA) technologies deployed



by AT&T to support today’s IoT devices. They are highly secure, have features that can lower power consumption to extend battery life, enhance coverage to connect hard-to-reach devices, and come at a lower hardware cost than standard LTE. They are the first networks with dedicated spectrum optimized for IoT.

Accelerate the speed of business with LPWA Networks (LTE-M and NB-IoT)

Customer use cases:

LTE-M is a licensed 3GPP standard air interface technology evolution of LTE, specifically built for IoT devices. LTE-M is ideal for supporting a range of IoT use cases that require lower data rates and features such as mobility or voice (i.e., alarm panels, wearables, and metering). NB-IoT is ideal for stationary devices with ultra-low bandwidth requirements. These innovative technologies enhanced coverage and longer battery life with carrier-grade security for a new

generation of industries and applications. Examples offer a unique combination of:

Smart cities: Smart Cities : Utilities (LTE-M and NB-IoT)

Meters are typically installed underground or in deep basements and garages, where receiving signals can be problematic. Because meters are often not in proximity to power sources, they need to run on battery power for at least several years. Battery change interval can be an important cost factor. LTE-M offers coverage enhancement to better penetrate walls and underground, plus power-saving features that extend battery life to last up to ten years. These are a few examples of how LTE-M offers positive changes in utilities monitoring and services.

Asset Management (LTE-M and NB-IoT)

LPWA is designed to support a massive number of devices. Research shows that the number of

“Innovations like LTE-M and NB-IoT will bring IoT to more end points than ever before. It’s part of our strategy to offer the widest range of IoT network options to our customers.”

Chris Penrose, President, Internet of Things Solutions, AT&T

connected devices will increase 4.5x to over 27 billion by 2025.* Lower cost modules enable enterprises in the asset management vertical to connect even more devices. LTE-M will eventually allow for tower handoff, giving it the same strong mobility characteristics found in traditional cellular, which is extremely helpful for customers who want to track movement over local or wide areas. LTE-M opens exciting possibilities in tracking and asset monitoring from shipping containers to fleet vehicles, and even in locating valuable assets, children, or pets.

NB-IoT is ideal for stationary devices which won't require tower hand-off. NB-IoT can help track devices locally in near-fixed locations. NB-IoT opens opportunities to track healthcare devices in a hospital, assets on a manufacturing floor, and fixed-location sensors in agriculture, oil and gas, and other industries.

Technical specifications:

Communication

Cellular (LTE)

Device used

Any AT&T LTE-M or NB-IoT certified modules and chips are eligible for use on the network

Peak throughput

LTE-M: 300 kbps

NB-IoT: 50 kbps

LTE bands

2, 4, 12

Channel bandwidth

LTE-M: 1.4Mhz

NB-IoT: 200khz

UE transmit power

20 dBm Allowed

Features

Power-saving mode available now. eDRX and CE are available now

Why AT&T

The powerful AT&T network supports integrated systems with a single, highly secure network with nationwide service and redundancies. Take advantage of our progressive and ever-improving network to drive innovation for your business.

Find out how we can help you put LTE-M into action for your business.

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