

The network you've asked for from the company you can depend on

Connect your solutions on the network made for IoT: LTE-M

Are you looking to expand your IoT solutions and need to connect devices in a highly secure, cost-effective, reliable way? Utilize the LTE-M network, designed and optimized 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.

Now, with LTE-M, 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 (also referred to as LTE Cat-M1) is a Low Power Wide Area (LPWA) technology deployed by AT&T to support today's IoT devices, even in the most challenging environments. It is highly secure, has features that can lower power consumption to extend battery life, enhances coverage to connect hard-to-reach devices, and comes at a lower hardware cost than standard LTE. It is the first network on a dedicated spectrum that is optimized for IoT.



Accelerate the speed of business with LTE-M

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). This innovative technology offers a unique combination of enhanced coverage and longer battery life with carrier-grade security for a new generation of industries and applications. Examples include:

Smart cities: utilities

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

Retail

Many large retailers are concerned about security using Wi-Fi and other unlicensed technologies but need the coverage that they provide for their devices. LTE-M would address the concerns of coverage and hardware cost while providing a stable and highly secure network. For example, retailers now have the ability to employ a range of sensors in their locations that use low-cost, low-power LTE-M connections to monitor everything from customer engagement with physical inventory on the shelf to the movement of shoppers themselves.

LTE-M is ideal for IoT solutions looking to extend battery life, reduce costs and/or cover hard to reach devices:



Lower cost



Extended battery life



Enhanced coverage

*Machina Research, August 3, 2016.



AT&T Internet of Things

LTE-M Network

Product features

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

“Innovations like LTE-M 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

Technical specifications

Communication

Cellular (LTE)

Device used

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

Peak throughput

384 kbps

LTE bands

2, 4, 12

Channel bandwidth

1.4 MHz

UE transmit power

20 dBm Allowed

Features

Power-saving mode available now.

Coming soon: EDRX cycles, coverage extension.

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



AT&T network

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.

Contact:

Email:

Phone:

