

IoT Connectivity from Lister Communications



**COME TO
THE EXPERTS**

Telecom Solutions

Mobiles

IT Support

Connectivity

MULTI-NETWORK 2G | 4G | 5G | NB-IoT | LTE-M

Whether you need SIM connectivity globally, across regions like Europe, or in specific countries like the UK, we provide reliable performance wherever your devices operate. This flexibility allows you to scale and adapt your connectivity solutions based on your operational requirements.

WHY CHOOSE LISTER COMMUNICATIONS FOR IoT?

-  **IoT Expertise** Our experts help you select the best technology to maximize ROI and ensure smooth deployment.
-  **Partnerships** Access to multiple networks & vendors for diverse IoT solutions.
-  **Robust and Reliable Security** Comprehensive security measures with multi-layered protection, ensuring data integrity and safeguarding your IoT infrastructure at every step.
-  **Managed Services** Integrated SIM management and real-time monitoring for remote control over your deployments.
-  **Rapid and Professional Deployment** Efficient deployment backed by expert solution design, dedicated customer service, and reliable technical support.
-  **Trusted Supplier** With years of experience, a track record of successful deployments around the world, we're a trusted partner for IoT solutions across a wide range of industries.

Lister Communications provides IoT SIM cards that support a range of connectivity standards to meet various challenges, device applications and use cases



LISTER COMMUNICATIONS: SEAMLESS MULTINETWORK CONNECTIVITY

Multi-network IoT Connectivity 2G | 4G | 5G

Multinetwork cellular IoT connectivity leverages 2G, 4G, and 5G networks to deliver exceptional flexibility and coverage for diverse IoT applications. Supporting multiple network types, our unsteered IOT SIMs ensure reliable connections in environments ranging from urban centres to remote areas. This adds resilience and allows for business continuity.

Devices can switch between networks for continuous connectivity and optimized data speeds based on location and needs. Perfect for mission-critical uses like security, payments, and logistics, multinetwork connectivity provides the resilience and scalability to support IoT devices throughout their lifecycle, even amid network changes.



Enhanced Coverage and Reliability

Ensures consistent connectivity across diverse environments, switching between networks as needed.



Future-Proof Flexibility Supports 2G, 4G, and 5G networks, providing long-term resilience and adaptability as network technologies evolve.



Optimized Data Transfer Allows devices to select the best available network for efficient data transfer based on location and network conditions.



Mission-Critical Dependability Provides robust connectivity for applications that require high reliability, such as security, healthcare, and payment systems.



Scalability Across Applications Ideal for a wide range of IoT use cases, from urban deployments to remote monitoring, offering versatility for various industry needs.



LISTER COMMUNICATIONS: YOUR PARTNER FOR ADVANCED IoT CONNECTIVITY

Narrowband IoT NB-IoT

NB-IoT is a low-power, wide-area technology designed for stationary, low-data IoT devices. It enables long battery life and strong signal penetration, ideal for hard-to-reach areas like basements or underground sites.

Its benefits include energy efficiency, cost-effective hardware, and support for large-scale deployments, making it perfect for smart cities, utility meters, and environmental sensors. With deep reach and low data needs, NB-IoT ensures reliable, long-term connectivity for devices with extended lifespans.



Battery Efficiency Ideal for low-power devices, providing the most energy-efficient solution for battery or solar-powered applications. Supports PSM & eDRX.



Extended Product Life Supports long life cycles, perfect for devices with low, intermittent data needs, and no access to mains power.



Superior Signal Penetration Deep signal reach for challenging locations such as basements, underground car parks, or remote sensors.



Scalability for Mass Deployments Optimized for large-scale deployments with low hardware costs and operational longevity.



LISTER COMMUNICATIONS: EMPOWERING RELIABLE IoT CONNECTIVITY

Long Term Evolution for Machines **LTE-M**

LTE-M (Long Term Evolution for Machines) is a mobile network technology tailored for IoT devices needing moderate data rates, real-time communication, and mobility.

With more bandwidth than NB-IoT, LTE-M supports applications like asset tracking, fleet management, and remote monitoring. Key advantages include higher data capacity, power-saving features for longer battery life, and secure, stable connectivity with robust coverage.

Its support for moving devices and fast data transfer makes LTE-M ideal for dynamic IoT applications across various sectors.



Higher Bandwidth Offers greater data capacity than NB-IoT, suitable for applications needing moderate data rates or real-time data.



Mobility Support Ensures connectivity even in mobile applications, such as fleet tracking, due to cell handover capabilities.



Power Savings Mode Enables extended battery life, while offering the flexibility of higher data throughput when needed.



Enhanced Security LTE-M has access to network security options for additional encryption and private network configurations, suitable for secure IoT applications.



LISTER COMMUNICATIONS: TAILORED IoT SOLUTIONS FOR EVERY INDUSTRY

One provider, multiple solutions

Explore how Lister Communications delivers impactful IoT solutions across industries. From smart buildings to logistics, healthcare, and education, our tailored applications enhance efficiency, improve security, and unlock advanced connectivity.

 <p>Smart Building Optimize building intelligence with smart security, metering, automated lighting and heating, and streamlined facility management for better efficiency and control.</p>	 <p>Healthcare Enable patient monitoring, medication tracking, medical history management, telehealth devices, and homecare solutions for improved outcomes and accessibility.</p>
 <p>Utilities Enhance water and waste management with spill detection, flow monitoring, pressure tracking, and infrastructure health for safer, sustainable operations</p>	 <p>Energy Advance smart metering, demand forecasting, EV charging networks, and condition monitoring for efficient, sustainable energy management.</p>
 <p>Manufacturing Boost predictive maintenance, production monitoring, downtime management, workplace safety, and supply chain efficiency for optimized operations.</p>	 <p>Retail Streamline POS systems, digital signage, inventory tracking, and real-time product availability to improve customer experience and operations.</p>
 <p>Agriculture Enhance crop and yield tracking, livestock monitoring, fence surveillance, and automated irrigation for better productivity and resource management.</p>	 <p>Logistics Revolutionize fleet management, cargo tracking, condition monitoring, warehouse automation, and traffic management for seamless logistics.</p>

These are just a few examples—virtually every industry can unlock new efficiencies, insights, and innovations with the right IoT connectivity solutions.

LISTER COMMUNICATIONS: SECURITY SOLUTIONS FOR IoT CONNECTIVITY

At Lister Communications, security is central to every IoT deployment. We can provide advanced features to protect data, control access, and secure your IoT infrastructure. Some of our solutions have advanced features to help ensure your data stays private and your devices safe, allowing you to focus on the benefits IoT brings to your business.

Here's how we can secure your IoT connections:

KEY SECURITY OPTIONS

Fixed IP & Private APNs: Assign fixed IPs and use private APNs to control access and improve network reliability for critical applications.

SECURE TRAFFIC ROUTING

Some networks let you configure private virtual networks for groups of SIMs, ensuring that traffic doesn't route over the public internet. This minimizes exposure to cyber threats and unauthorized access, giving you complete control over IP addressing and network security. Ask for details.

Update virtual network configurations without altering device settings, including APNs, for seamless adjustments as your security needs evolve.

SECURITY-AS-A-SERVICE

Set up and manage VPNs directly in the network ensuring data encryption for all connected devices. This feature provides added security even for devices without native VPN support, with configurations adjustable per SIM in real time.

SECURE REMOTE ACCESS

Access and monitor devices securely via the SIM without exposing them to the public internet. This enables real-time monitoring, diagnostics, and remote troubleshooting, reducing the need for costly field visits and minimizing downtime.

IMEI LOCKING

Lock SIMs to specific device IMEIs to prevent unauthorized usage in other devices. This feature enhances security and ensures that your SIMs are only used in approved devices, protecting your network integrity.

At Lister Communications, we know IoT security isn't one-size-fits-all. Our customizable features provide complete control over your network, keeping your data protected and operations secure.

Contact us to learn how you can safeguard your IoT infrastructure.

LISTER IOT LAB: ENHANCE YOUR IOT SUCCESS WITH EXPERT GUIDANCE

Lister IOT Lab provides a free service to help remove barriers and make IoT adoption more accessible. Whether you're new to IoT or refining an existing solution, we offer expert guidance and resources with no upfront cost to help get you started.

Apply to join Lister IOT Lab today



FREE to join Perfect for businesses exploring IoT without upfront investment.



Access free IOT Test SIMs Test coverage, network performance, and real-world applications before committing to a solution.



Expert IoT Consultation and Support Gain valuable insights on cost, efficiency, usage requirements and ROI before committing resources.



Exclusive Access to Industry Insights Reduce uncertainty and make informed decisions before scaling your IoT deployment.



Cutting-Edge IoT Connectivity Solutions Access market-leading services that focus on security, innovation, scalability, and flexibility

Lister IoT LAB collaborates with businesses to explore, develop, and deploy cutting-edge IoT solutions. Whether you're building a new connected product, refining an existing concept, or testing emerging technologies, we provide the expertise and infrastructure to accelerate your journey.

INNOVATE. TEST. LAUNCH ACCELERATE YOUR CONNECTED SOLUTIONS FROM CONCEPT TO DEPLOYMENT

What is Lister IoT LAB?

The Lister IoT LAB is designed to help businesses explore the potential of IoT—without upfront costs or commitments.

Our goal is to engage and empower businesses by providing hands-on access to IoT solutions, expert consultancy, and real-world testing environments.

Why Partner with Lister IoT LAB?

REDUCE RISK - Validate IoT concepts before full-scale deployment.

ACCELERATE DEVELOPMENT - Test connectivity, security, and integration faster.

MAXIMISE PERFORMANCE - Choose the best-fit IoT connectivity for your solution.

ENHANCE SECURITY - Protect your IoT ecosystem with enterprise-grade security.

Whether you need expert guidance, cutting-edge infrastructure, or a collaborative partner to bring your IoT solution to life, we're here to help.

JOIN US AND TURN YOUR IoT VISION INTO REALITY.



CONNECTIVITY TECHNOLOGY COMPARISON FOR IoT APPLICATIONS

Overview of specifications for 2G, 4G, 5G, LTE-M, and NB-IoT

PARAMETER	2G	4G	5G	LTE-M	NB-IOT
Data Speeds	Typically 20-40kbps, up to 80-100kbps	Typically 5-30Mbps. Up to 150Mbps	Typically 100-300Mbps. High speeds 300-600Mbps, Max 1Gbps	Typically 200-400kbps. Up to 1Mbps. Suitable for low-bandwidth applications.	Typically 20-60kbps. Up to 250Kbps for low-data, low-power.
Frequency Bands	850-1900 MHz	700 MHz - 2.5 GHz	Multiple Bands (e.g., 3.5 GHz, mm Wave)	LTE Band 20 (800 MHz), Band 8 (900 MHz) for extended coverage.	Various LTE bands (e.g., 800, 900 MHz) for deep coverage.
Bandwidth	200 kHz	1.4 MHz - 20 MHz	Up to 400 MHz	Narrow 180 kHz channel, optimized for low-power IoT.	Narrow 180 kHz channel, for low data transfer.
Power Efficiency	Limited power-saving features	Improved over 2G with energy-saving modes	Supports energy-saving and sleep modes	Supports Power Saving Mode (PSM) and Extended Discontinuous Reception (eDRX) for years of battery life.	Excellent power-saving features, designed for years on battery. Supports PSM & eDRX
Signal Penetration	Basic indoor and outdoor coverage	Good indoor and outdoor coverage	Excellent, especially with lower frequencies	Exceptional reach, providing deep coverage indoors and underground for hard-to-reach areas.	Deep penetration, suitable for remote areas and challenging environments.
Latency	High (up to 300 ms), unsuitable for real-time apps	Medium to low (30-50 ms)	Typically 10-20ms. Ideal for real-time applications	Typically 100-150 ms, suitable for low-latency IoT but not real-time control.	Typically 1.6 to 10 seconds, not intended for real-time use.
Example Applications	Basic telematics, SMS	Video, voice, broadband	Real-time control, VR/AR, autonomous vehicles	Asset tracking, industrial monitoring remote sensors. Both static + moving	Environmental monitoring, smart metering, etc. Static applications

CONNECT WITH LISTER COMMUNICATIONS AND UNLOCK THE POWER OF IoT

Ready to elevate your business with secure, reliable, and scalable IoT connectivity? Lister Communications is here to guide you every step of the way. From choosing the right technology to seamless deployment and ongoing support, we deliver tailored solutions to help your business grow, adapt, and innovate.

LET'S GET STARTED!

Contact our team for a personalized consultation and discover how our IoT solutions can transform your operations.

Join Lister IOT Lab and gain access to free trial SIMs to experience the quality, coverage, and security of our IoT connectivity solutions first hand?

Visit our website to explore our IOT Knowledge base, read case studies, and find out how IoT can drive change in your industry.

CALL 01453 829200

EMAIL hello@lister-communications.co.uk

www.lister-communications.co.uk

"Lister Communications consistently provides top-notch service that has significantly enhanced our operations.

Their support, understanding of our needs, and quick responses have been instrumental in keeping us connected and efficient.

We couldn't be happier with the partnership and the positive impact it has had on our business."

Andy Harper, Managing Director - D W Dunn

EMPOWERING INDUSTRIES TO CONNECT, SECURE, AND GROW IN AN EVER-EVOLVING DIGITAL WORLD.



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