

# u-blox services product overview



Simplifying data communication between IoT devices and the enterprise

## We make wireless communication and location easy

We deliver leading wireless technology to reliably locate and connect people and devices. We are forging a path in which our services can be combined with products to enhance functionality, improve quality of service in challenging conditions, and solve the problems of complexity, cost, and availability. Our services portfolio consists of three essential product groups:



### IoT Communication-as-a-Service

Combines true global connectivity with a fixed-price global MQTT network that works seamlessly in 190 countries.



### IoT Location-as-a-Service

Sets the standard for reliable and fast location information and for delivering accurate assistance and augmentation data.



### IoT Security-as-a-Service

Protects your business and your data, with safety as a core value, through a world-class scalable symmetric key management system.

## Thingstream is the u-blox IoT service delivery platform



Thingstream is a cloud-based delivery platform and administration interface for enterprise IoT services. The Thingstream platform comprises IoT connectivity, security, and location services, enterprise-grade MQTT broker, visual programming, simple enterprise integration, with flexible pricing plans tailored to specific use cases and applications. The intuitive interface provides a self-serve environment from which users have autonomy to manage IoT device fleets, manage billing, monitor events, and have complete API control of functionality. Thingstream enables a frictionless business experience because it eliminates complexities and allows users to engage more efficiently and reduce time-to-market.

## Thingstream features and benefits



**Enterprise grade**

Auto-scaling technology proven to support billions of messages



**One-stop solution**

Delivering all u-blox IoT communication, security, and location services



**Simple enterprise integration**

Ready-made connectors into leading cloud platforms



**Data flow manager**

Visual programming interface to easily process and transform data



**Connect everything**

Easily connect and manage IoT devices, APIs, and online services



**Flexible plans**

Simple pay as you go pricing plans tailored to suit your needs

Learn more about the Thingstream platform at <https://www.u-blox.com/product/thingstream>

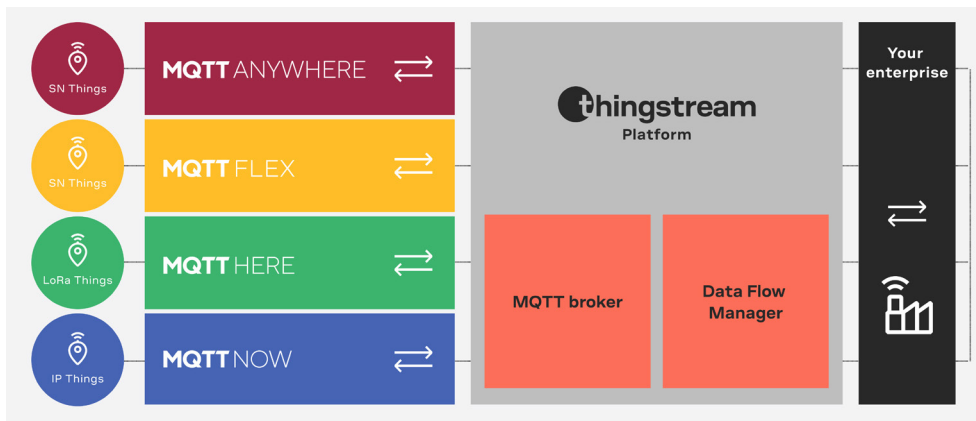


## We provide IoT Communication-as-a-Service

Communication is so much more than connectivity. The complexity of IoT communication is solved by a comprehensive end-to-end solution based on the industry standard MQTT, with our network that is globally available in 190 countries. We simplify cost of ownership by offering a product “as-a-Service” at a predictable cost with on-demand scalability.

With IoT Communication-as-a-Service, getting data between IoT devices anywhere in the world and the enterprise is simplified thanks to our four complementary products – [MQTT Anywhere](#), [MQTT Flex](#), [MQTT Here](#), and [MQTT Now](#).

These products are built on top of the foundation of our scalable, high-performance MQTT broker and powerful [Data Flow Manager](#), allowing simple processing, transformation, and integration of messages into the enterprise.

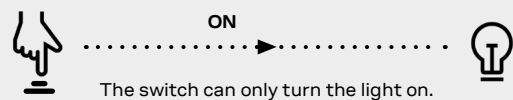


## MQTT is ideally suited to the Internet of Things

IoT devices and applications require a reliable, robust, and secure messaging protocol. That is where MQTT comes in. MQTT is an OASIS standard messaging protocol for the Internet of Things (IoT). It is designed as an extremely lightweight publish/subscribe messaging transport that is ideal for connecting remote devices with a small code footprint and minimal network bandwidth. (Source: <https://mqtt.org/>)

### Simplified communication

Communication is a complex problem. MQTT reduces complexity, allowing a single connection to a message topic. Data is logically structured and can be processed flexibly.



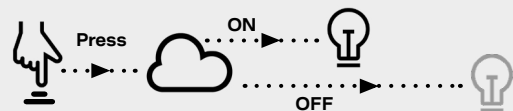
### Eliminate polling

MQTT allows instantaneous, push-based delivery, eliminating the need for message consumers to periodically check or poll for new information. This dramatically reduces network traffic.



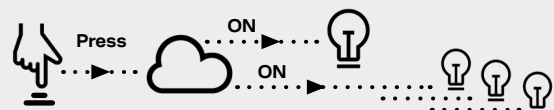
### Dynamic targeting

MQTT makes discovery of services easier and less error prone. Instead of maintaining a roster of peers that an application can send messages to, a publisher simply posts messages to a topic.



### Decouple and scale

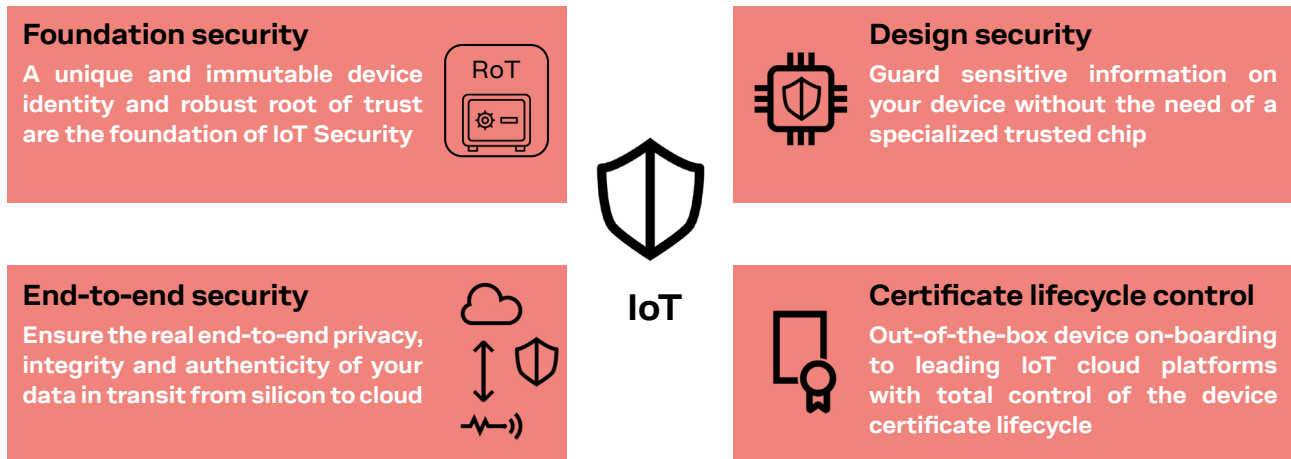
MQTT also makes solutions more flexible and enables scale. It allows changes in communication patterns, adding or changing functionality without sending ripple effects across the system.





## We provide IoT Security-as-a-Service

Our innovative IoT security solution makes it extremely simple to protect your data, both on the device and during the transmission of data from the device to the cloud. This ensures that you can focus on your business and enjoy faster time-to-market. We implement a true end-to-end concept where data is protected from the device to the end-user and is not visible by the intermediate nodes/platforms nor by the service provider.



Protect your IoT device and sensitive data for its lifetime by leveraging the u-blox toolbox optimized for LPWA devices.

### IoT Security-as-a-Service features and services

	LARA-R6 series	SARA-R410M-x3B	SARA-R422	SARA-R422S	SARA-R422M8S	SARA-R5 series	ALEX-R510M8S
<b>Foundation security</b>							
Security root of trust	TEE	TEE	TEE	TEE	TEE	SE	SE
Secure boot	•	•	•	•	•	•	•
Secure production	•	•	•	•	•	•	•
Secure updates	•	•	•	•	•	•	•
Anti-cloning detection & rejection	•	•	•	•	•	•	•
Secure communication (D)TLS	•	•	•	•	•	•	•
<b>Design security</b>							
Local data protection	•	•	•	•	•	•	•
Local C2C Security						•	•
<b>End-to-end security</b>							
E2E symmetric KMS	•	•	•	•	•	•	•
E2E data protection	•	•	•	•	•	•	•
E2E data integrity	□			□	□	•	•
<b>Certificate lifecycle control</b>							
Zero touch provisioning	□			□	□	•	•
IoT certificate manager	□			□	□	•	•

C2C = chip-to-chip    E2E = end-to-end    KMS = key management system

TEE = trusted execution environment    □ = Available in future FW version  
SE = secure element



## We provide IoT Location-as-a-Service

IoT Location-as-a-Service ensures reliable, fast position information and delivers accurate assistance and error correction data for IoT devices, even in constrained and challenging environments. GNSS users expect instant position information, which is not often possible under adverse signal conditions; therefore, location, assistance, and correction services become essential functionalities. There is a smart solution that answers this broad imperative:



**AssistNow™** provides real-time online Assisted-GNSS backed by our warranty and support. It accelerates GNSS performance and lowers power consumption. Integration is easy.



**CellLocate®** provides a best-in-class mobile network-based location service with global availability. This end-to-end solution is proven, scalable, and ready to virtually eliminate any “no position scenario”.



**PointPerfect™** brings high-precision GNSS to the mass market by delivering sub-10 cm accuracy positioning within seconds combined with flexible service plans and an easy-to-use delivery platform.



**CloudLocate™** delivers cloud-based positioning to extend the life of energy-constrained IoT applications up to 10x compared with standard GNSS power-saving approaches.

## u-blox Services Values and Promise



**Warranty and support:** We stand behind the reliability and availability of our services with full warranty, support of our technical experts, and with Enterprise Support levels all designed to help you achieve successful outcomes.



**Frictionless for business:** Our intuitive cloud platform and self-serve environment eliminates complexities and allows users to engage more efficiently, reducing time-to-market.



**Efficiency as a core principle:** Smart selection of message formatting and data delivery protocols reduces data overhead, time spent on-the-air, and energy consumption; enabling users to lower costs, extend device life cycles and achieve power autonomy.



**Ease of integration:** Our services cooperate smoothly with u-blox positioning and connectivity hardware, providing a one-stop-shop solution from silicon to cloud. Use is not restricted to a single hardware provider, allowing customers the flexibility to optimize solutions.



**Security:** We believe that making sure IoT devices are secure is just as important as making sure that they work as every link or node on the network is a potential exploit vector.

## Further information

For contact information, see [www.u-blox.com/contact-us](http://www.u-blox.com/contact-us).

For more product details and ordering information, see the [product data sheet](#).

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