

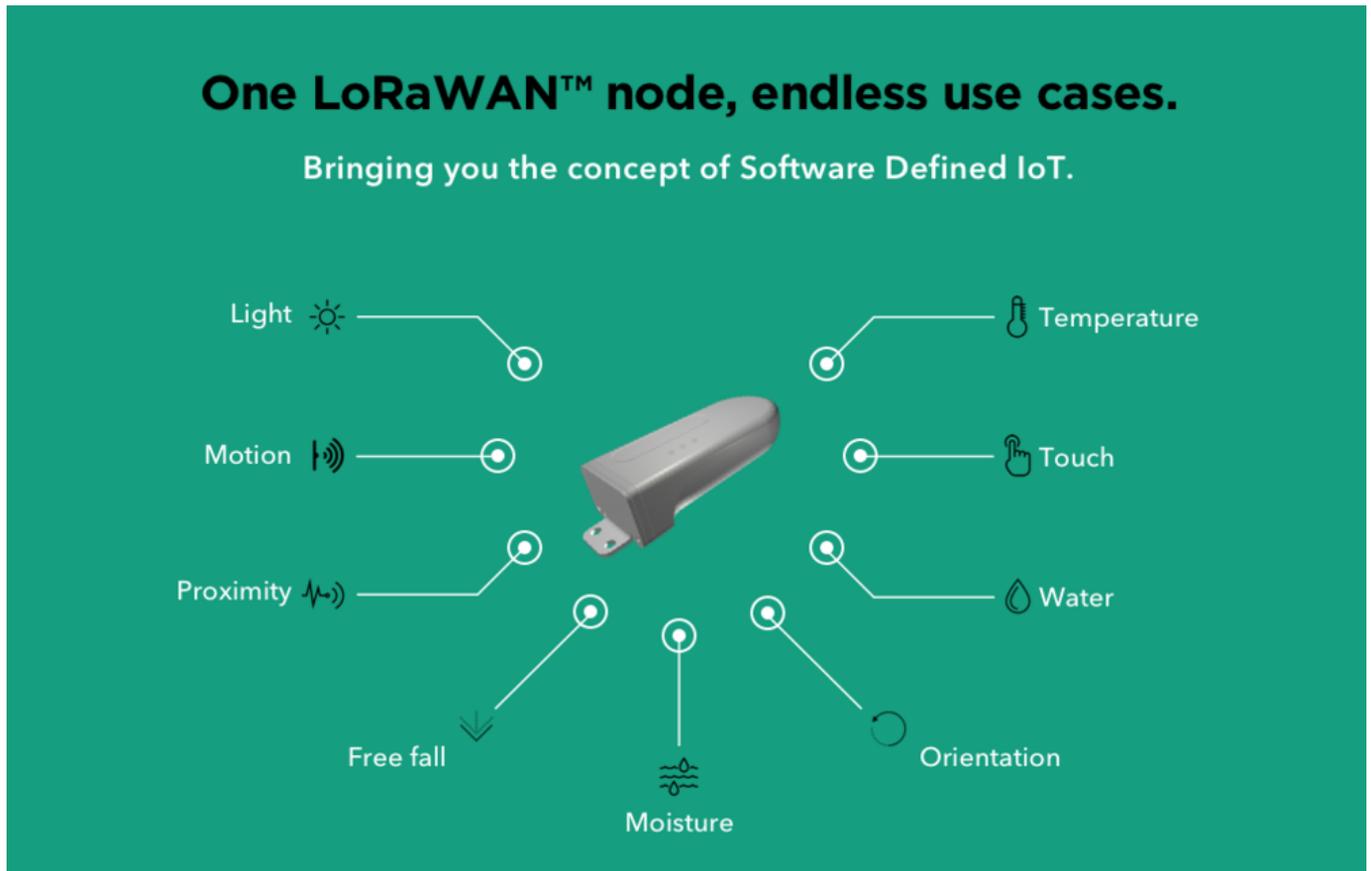
🕒 31 January 2019, 10:00 (CET)

The Generic Node is a disruptive new LoRaWAN™ device based on the concept of Software Defined IoT

Amsterdam, 31 January 2019: The Things Industries, a global Internet of Things service provider, announced another new LoRaWAN™ device - a node based on the concept of software defined internet of things. The announcement was made at the opening ceremony of The Things Conference together with [Arm](#), [Arrow Electronics](#), [Microchip](#) and [TWTG](#) as the partners.



Generic Node is a LoRaWAN end device packed with multiple sensors and can support numerous use cases on a single unit with just one supply chain. Whether it is an application for cold chain, retail, smart building, smart city, agriculture or smart offices it can support all of them with an easy to use provisioning process with Arm's Mbed OS. The application running on the Generic node is provisioned remotely over LoRaWAN or updating the firmware over the air, while the device is in field. This brings immense economies of scale advantage which allows to bring this product at a disruptively low price.



At the core of the Generic Node is Microchip's SAM R34/R35, the System-in-Package that combines a sub-GHz LoRa radio and ultra-low-power MCU. The device has a secure element allowing it to join any LoRaWAN network in the world which supports the latest specifications set by the LoRa Alliance.

As the applications can be loaded on the device later, it can be used in many different use cases.

30+ Use cases

FACILITY MANAGEMENT

- Toilet usage
- Dispenser usage
- Temperature
- Legionella prevention
- Flood detection
- Cold chain auditing
- Indoor plants soil moisture
- Elevator monitoring

LEISURE

- Unwanted entrance to boat or holiday home
- Flood detection boats

SMART CITY

- Water level height
- Manhole
- Mobile sign status
- Tracking
- Unwanted infrastructure housing

RETAIL

- Clothing rack interest
- Changing room usage
- Empty shelf detection
- Customer satisfaction
- Cold chain

BUILDING

- Desk presence
- Temperature
- Unauthorized access

FARMING

- Greenhouse local temperature
- Soil moisture
- Animal tracking
- Waterheight

INDUSTRIAL

- Predictive maintenance
- Assembly line monitoring

It comes with everything you expect from an industrial LoRaWAN sensor node. Long range, longevity on a single battery.



Key features

Secure Join & End-To-End Encryption

Firmware Over The Air Update

Ultra Low Power

Standard Replaceable AA Battery

Open Development Tools

LoRaWAN Operator Agnostic

The deployment of the apps can be done in several ways.

How to deploy

ZERO HARDWARE AND FIRMWARE DEVELOPMENT

- ✔ Provision app to node with LoRaWAN downlink
- ✔ Provision app on installation
- ✔ Pre-provisioned keys for secure join
- ✔ Don't worry about the hardware

CUSTOMIZE FIRMWARE

- Use Arm Mbed OS to build software ▲
- Debug on device with debugger cable ▲
- Mass provision through LoRaWAN firmware over the air update ▲
- Ship vanilla device, provision on installation ▲
- Push updates in production ▲

There are already several parties testing the device. Want to join the early access program? Join here: www.genericnode.com

The Generic Node allows you to start building IoT solutions without the complexity and risk of hardware engineering and lets you focus on the software that makes your product unique. We are super excited to release this into the ecosystem with our partners.

— Wienke Giezeman, CEO, The Things Industries

We let our developers free to put all their LoRaWAN knowledge and the hard lessons they learned to work while designing this product. We see the need in the market as it will address many problems with a single piece of hardware.

— John Tillema, CTO, TWIG

We are very proud to support this product, it supports our joint vision, as we look to embrace the growing ecosystem of developers and integrators around the globe, working hard to create and deploy new IoT solutions.

– Richard Curtin, Senior Vice President, Technology, RS Components

Developing power efficient Internet of Things (IoT) endpoint solutions has historically required developers to be well versed in embedded hardware development as well as aspects of radio frequency, creating a significant barrier to the adoption of IoT solutions overall. Providing a flexible production-ready endpoint that can adapt to multiple use cases in the way that the Generic Node does is an important step forward that lets developers focus on what they are best at building innovative ways to deliver value to their customers.

– Alistair Fulton, Vice President and General Manager, Semtech's Wireless and Sensing Products Group

IoT brings us endless possibilities to innovate. We are eager to test this product as the versatility it promises can further enhance the solutions we build for our customers.

– Rob Matthijssen, Client Director, Schuberg Philis

We are excited to see such a compelling product fully utilize the low-power and small form factor of our SAM R34 while setting a new standard for end-node secure authentication with the ATECC608A.

– Clayton Pillion, Director of Marketing for the Wireless Business Unit, Microchip

The first integrators will start using the product soon. Want to join the early access group? Join here: <https://www.genericnode.com/>

LoRaWAN™ is a mark used under license from the LoRa Alliance™. LoRa® is a registered trademark of Semtech.



THE THINGS
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