

thin<sup>x</sup>tra  
Empowering Internet of Things



MICRO COVERAGE SERVICE  
ON SIGFOX IOT NETWORK

HONG KONG

July 2019

[www.thinxtra.com/micro](http://www.thinxtra.com/micro)

# COVERAGE WHERE YOU NEED IT, MADE EASY!

## A PLUG & PLAY SOLUTION WITH SIGFOX ACCESS STATION MICRO

Thinextra has rolled out the first IoT nationwide networks in Australia, New Zealand and Hong Kong, based on the most mature LPWAN (Low Power Wide Area Network) technology: Sigfox. This is the missing link –connectivity– between devices and platforms.

Sigfox network is bringing billions of things to life by revolutionising the way Internet of Things connect.

Sigfox is particularly well suited for IoT applications requiring ultra low cost, low power consumption, ubiquitous and simple connectivity to enable mass deployment of IoT.

Thinextra is covering in priority urban areas, but also empowering companies and organisations to further extend this coverage into areas where they need it - be it in regional or remote locations, or increased coverage density in challenging environments (underground, deep indoor).

By offering a “DIY” simple and low cost solution for increasing coverage as required, Thinextra is providing a truly flexible, scalable and interoperable network.

This Thinextra service is called Micro Coverage.

# Coverage where you need it, made easy with Sigfox Access Station Micro!



... Where you need it  
Indoor and outdoor coverage

## Simple Network Wherever

**Micro Coverage Service** provides you Sigfox coverage no matter where you install the Station: indoor or outdoor, in an attic or underground, in warehouses, buildings, shops, farms or offices...where there is currently no Sigfox coverage.

## Adapted Performance

Benefits from a wide coverage and the right capacity solution:  
Coverage: up to 10 km outdoor, 2km indoor  
Capacity: 70,000 messages/day/Station



... Made easy  
Plug and Use

## Easy Installation

**Sigfox Access Station Micro**, with its sleek compact form factor and embedded antenna, can be easily installed within minutes without professional assistance.  
*More technical info at [micro.sigfox.com](http://micro.sigfox.com)*

## Remote Monitoring & Support

from our Network Operation centre. This applies to the Station, devices, and Sigfox back-end.



... Affordable  
Cost efficient

## Best Value for Money

Sigfox Access Station Micro addresses the challenges of **Affordable Coverage Densification** by keeping the cost of your IoT solution deployment and operations low.

Furthermore, with extremely low energy consumption, the Access Station Micro is compatible with solar panel deployment, enabling untapped application connectivity where no power source is available.

## More Than A Private Network

- Roaming outside your covered area at no extra cost
- Sigfox global network access
- No configuration/pairing of your Sigfox ready devices, automatically recognised by the network.
- Guaranteed Quality of Service (QoS)
- Maintenance and support included
- Simple, plug&play style set up
- No hidden cost

## Micro Coverage Service

The service package includes:

- **Sigfox Access Station Micro** to create the adapted indoor or outdoor coverage
- Remote commissioning
- **Remote Support** in case of malfunction (No on-site intervention)
- Access to **Sigfox Cloud Backend**
- Monitoring of equipment and usage

# SIGFOX ACCESS STATION MICRO

## Typical Applications

- Industry specific coverage (Supply Chain and Logistics, Industry, Building Management, Retail, Agriculture, Mining, Remote areas, Forestry & Bushland,...)
- Network densification (underground parking, deep indoor, malls,...)
- Demonstrations and Proof of concept (to guarantee coverage where required)
- Solution development in uncovered areas

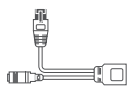
## Key Features

- Coverage: up to 10 km outdoor, 2km indoor (depending on environment)
- Capacity: 70,000 messages/day from 1000s of devices
- Mounting options: horizontal or vertical (on desk, wall or ceiling)
- Management tools for technical support:
  - Locally with Android app (configuration, tests)
  - Remotely via Sigfox OSS platform (Configuration, Monitoring, Firmware upgrade)

## Package Contents



Sigfox Access Station Micro



Passive PoE injector



Power supply adapter



Mounting kits: screws & cable ties



1.5m Ethernet cable



Quick Start guide & Safety notice

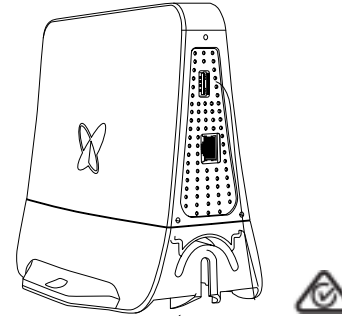
## Complementary Accessories with Premium version :



3G/4G dongle



Sealing cover



More technical info, video, user guide and user manual at [micro.sigfox.com](http://micro.sigfox.com)

### RADIO CHARACTERISTICS

Standard	Sigfox Ultra Narrow Band Protocol for IoT
Operating frequency	920-923MHz
Max Receiver Sensitivity	-124dBm @ 600bps
Data Rate and Modulation	600 bps D-BPSK (UL), 600 bps GFSK (DL), OOK (Monarch beacon)
Max Transmit Power (EIRP)*	23 dBm ± 1dB
Antenna	Embedded
Maximum Capacity	70,000 messages / day

### INTERFACES

Ethernet	1 x 10/100BaseT (RJ45) - POE+ type
USB port	1 x USB 2.0 female type A

### POWER

Power Consumption	2.3W typical (Rx mode, Ethernet) / 7.5W max peak (w/ 3G/4G dongle)
Power supply	Passive PoE with 240/110V AC adaptor in package
Input DC voltage	11 to 26VDC

### MECHANICAL AND ENVIRONMENTAL

Casing dimensions (W, H, D)	186 x 159 x 108 mm
Product weight	450g
Operating temperatures	-20°C to +55°C
Storage temperatures	-30°C to +85°C
Robustness	MTBF 92,000 hours
Protection	IP65 (with sealing cover)
Casing material	Plastic ASA/PC

# OPTIONS & PRICES



## Micro Coverage Service

Features	Standard	Premium
Access Station Micro (aka Micro Gateway)	✓	✓
Waterproof case for Outdoor Installation		✓
Backhaul Connectivity: BYO Ethernet	✓	✓
Backhaul Connectivity: 3G/4G Dongle*		✓
Online Support	✓	✓
Commissioning on the Sigfox Network	✓	✓
Plug & Play	✓	✓
Sigfox Backend Access	✓	✓
<b>Set up Fee for Staging &amp; Configuring</b>	\$2,250 +GST	\$3,375 +GST
<b>+ Ongoing Leasing Fee</b>	<b>\$150/Month</b>	<b>\$225/Month</b>

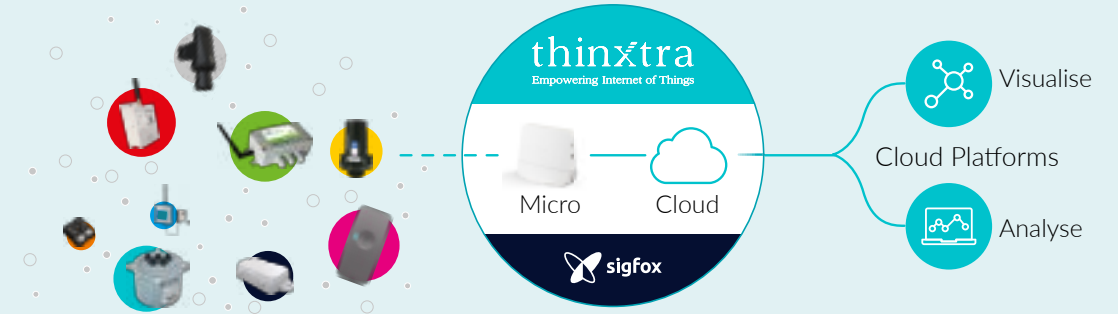
### Lease terms:

- All prices are in HK\$.
- The Access Point Micro is the property of Thinextra and will remain the property over the lease period.
- Minimum lease period is 12 months, invoiced and prepaid in advance until agreement is terminated and equipment is returned.
- Delivery cost to all Hong Kong areas is \$100. exc.GST.
- Return of the equipment to Thinextra office is at the hirer's cost and risk .
- In case of defect, and after assesement has been made by one of our technicians, Thinextra will take care of replacement unit and freight charges.
- Please refer to General Terms & Conditions at [thinextra.com/gtcaas](http://thinextra.com/gtcaas)

## Q&A

### How does this work?

Sigfox ready devices connect wirelessly to Sigfox Access Station Micro, which connects to Sigfox back-end cloud via ethernet (or 3G/4G), then sends data via API to whatever preferred IoT platform.



### \*What is the main differences between the 2 options: Standard & Premium?

In the Premium option, Micro can be installed outdoor and includes a 3G/4G USB dongle (SIM card with 500MB/month maximum allocation) as backhaul connectivity and a way for simpler support.

### Why are those 2 options appealing?

You can get Sigfox network coverage wherever you need it, plug & play.

### What is the catch?

None, except a 3 months commitment (set up fee + 3 months lease).

### Why are you doing it?

To enable IoT anywhere, to convince you that Sigfox solutions are easy to use and implement, and hopefully maintain a longer partnership than 3 months.

### How do I sign up?

Contact [ineedsigfox@thinextra.com](mailto:ineedsigfox@thinextra.com) with your requirement.

### How do I connect my Sigfox devices?

There are 2 options to subscribe your devices to the Sigfox network in order to access your data on your web platform or App:

- 1- Your solution partner might have already embedded the connectivity in its solution, so you don't need to do anything. Your devices are already paired with the network and its platform.
- 2- You can purchase connectivity from [buy.sigfox.com](http://buy.sigfox.com)

## MICRO COVERAGE SERVICE



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