



Sigfox Ready certification at a glance



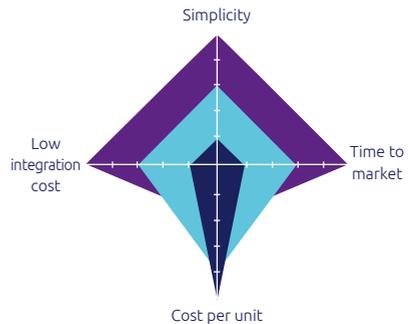
Any device communicating on the Sigfox network **must** be Sigfox certified.

- ✦ Ensure that Sigfox connectivity capability is integrated into devices with a satisfactory performance level.
- ✦ Take advantage of the impeccable Quality of Service of the Sigfox network by ensuring that each and every device conforms to Sigfox radio specifications.

Two different but complementary certifications are needed

1. Sigfox Verified certification is required for the **radio solution** (module and reference design)
2. Sigfox Ready certification is required for **end products** intending to communicate on the Sigfox Network

As far as the radio solution is concerned, either you use a Sigfox Verified one, or create your own. Each option has its advantages depending on your business model:



Sigfox certified device



Sigfox Verified certification for radio solution



Sigfox Ready certification for end-product

The goal here is to implement the Sigfox stack inside a radio solution. Sigfox technology can be integrated into any compatible sub-GHz radio transceiver (**royalty free**).

Sigfox Verified™ certification is for:

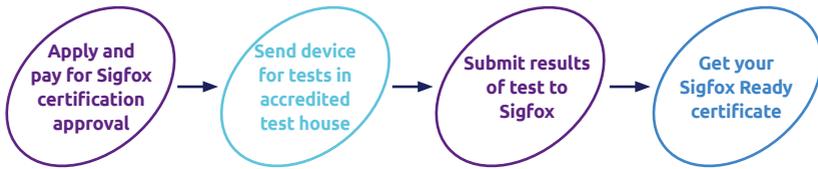
- a) Semiconductor suppliers and design houses willing to develop modules or reference designs which embed the Sigfox library.
- b) End customers developing a product based on a custom radio solution. **Tests in conducted mode** ensure that the Sigfox protocol is well integrated into the radio solution, and that spectrum and modulations are in strict accordance with Sigfox requirements or specifications.

Any customer who wants to launch a device able to communicate properly on the Sigfox network has to ensure that it is certified Sigfox Ready. The goal of this certification is to ensure that the radio performance of all devices communicating on Sigfox network provide the best experience for end customers. Based on **radiated emissions tests** executed by a third-party test house, customers can understand how well their devices perform in terms of radio. Note that the Sigfox Ready certification for end products is not a substitute for local regulations about, for example, electromagnetic compatibility, security and safety.

To find Sigfox Verified certified radio solutions, visit Partner Network portal: partners.sigfox.com

The radiated tests required for the Sigfox Ready certification assess the radiation performance of the end product. They will generate a classification level for each end product in uplink mode reflecting the efficiency of radiated power emitted by the end product.

Sigfox Ready certification process



The Sigfox certification process is performed online on BUILD portal:
build.sigfox.com

Certification testing is undertaken by local Sigfox accredited test houses so that device makers can bundle several tests in one package (Sigfox Ready, FCC, ETSI...).

To find your local test house, check out the BUILD portal:

build.sigfox.com/steps/certification/#sigfox-accredited-test-houses

If you are already using a test house for regulatory certifications and would like to include Sigfox Ready certification test, ask them to apply for accreditation from Sigfox (accreditation approval takes 2 to 3 months). More information is available at: partners.sigfox.com/companies/test-house

Cost of Sigfox Ready certification

Sigfox certification fee + **Accredited test house fee**
Paid to Sigfox on BUILD portal Paid to the test house

First new device: 1500€ (multiple RC versions possible)
Subsequent new devices: 1000 €

Between 500 € to 2000 € per RC (excluding shipment fees) depending on the accredited test house, radio configurations and number of devices. Multiple RC testing and certification can possibly be done at the same time.

Adapted prices for adapted devices

In addition, Sigfox offers adapted prices to device makers who wish to create a new device based on an already Sigfox Ready certified device. The certification cost for a new “derived” device achieved by changing the RC, or a new but “similar” device achieved by modifying the application, is reduced to 500€.

	Model name	Sensor	RC	Antenna	Casing and battery	PCB layout or stack	Modem (still Sigfox Verified)	Sigfox certification fee	External tests
Derived device	M	✗	M	✓	✗	✓	✓	500€	M
Similar device	M	✓	✗	✗	✗	✗	✗		Not necessary

✗ Change not accepted ✓ Change accepted M Mandatory

This price also applies when upgrading a device by just changing selected components:

	Model name	Sensor	RC	Antenna	Casing and battery	PCB layout or stack	Modem (still Sigfox Verified)	Sigfox certification fee	External tests
Upgraded device	✗	✗	✗	✓	✓	✓	✓	500€	M

✗ Change not accepted ✓ Change accepted M Mandatory

Radio configuration (RC)

Sigfox service operates in the ISM and SDR bands worldwide from 862 to 928 MHz. Local regulations may impose specific rules to operate in the unlicensed bands. Sigfox RC defines the radio parameters in which the device shall operate: Sigfox operating frequencies, output power, spectrum access mechanism, throughput, coexistence with other radio technologies. Multi RC devices are able to automatically select the correct Radio Configuration depending where they operate.

For more information :

resources.sigfox.com/document/radio-configuration



Full details on
Sigfox certification
can be found at
build.sigfox.com