

QUESTIONNAIRE REQUEST SIGFOX TESTS

Sigfox Certification is the acknowledgment of the compliance of a Device with Sigfox Certification Specifications in order to ensure its compatibility with Sigfox services and nominal performance on the network.

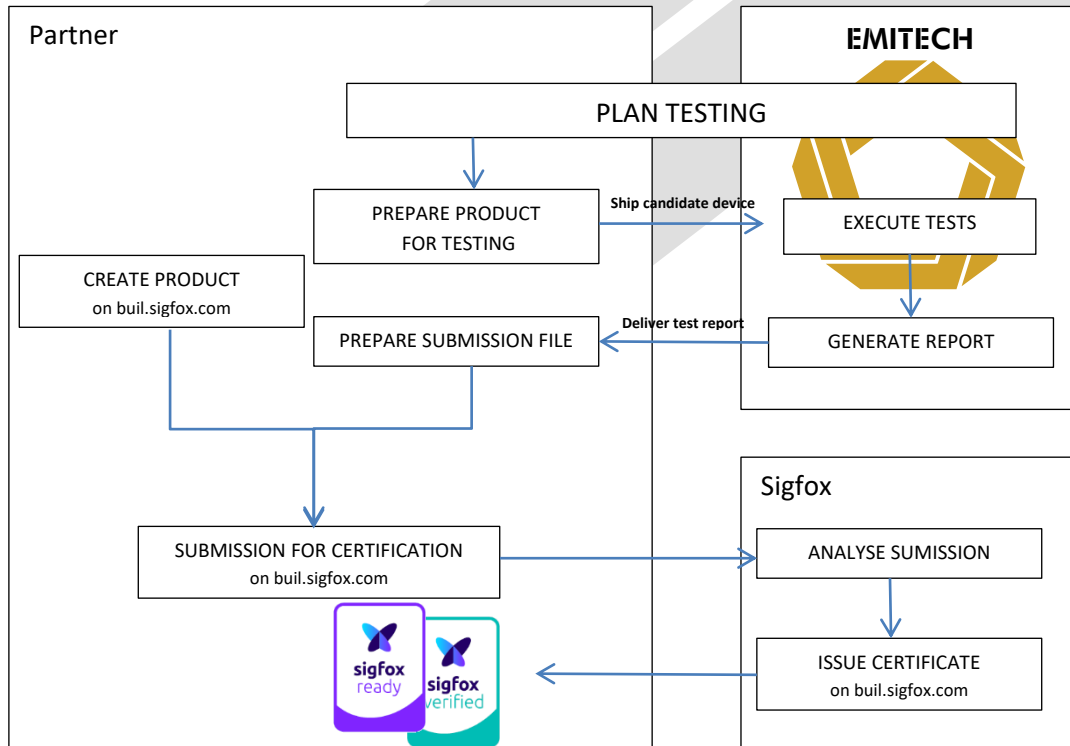
Getting certified implies the commitment of the partner to do everything necessary to ensure that all their devices registered on the Sigfox network will be compliant with the Sigfox Devices Specifications, in all operational conditions of the device and during its complete life-cycle.

Partner shall accompany this commitment with evidence of compliance generated on a Candidate Device, which is representative of all devices of the same model deployed on the network. This evidence is declarative information and test results, generated by Sigfox accredited test houses, and will be provided to Sigfox during the certification submission process (filing).

Following the partner's commitment and compliance documents, Sigfox delivers a Sigfox Ready certificate to the partner for a given device model.

There are two kinds of Sigfox tests:

- ⦿ RF & protocol tests, to check Sigfox protocol & RF performance compliance.
- ⦿ Radiated performance tests, to assess the radiated performances of the device. These radiation tests will define a radiated power classification of the device in uplink mode.



Here are essential documents that you should keep in mind when preparing for your tests:

- ⦿ [Be prepared for RF & Protocol tests \(PDF file, includes mandatory checklist\)](#)
- ⦿ [Be prepared for Radiated Performance tests](#)

There are two ways to achieve Sigfox Ready Certification:

- ⦿ Full approach: All Sigfox tests (RF & Protocol and Radiated Performance) are executed on the device.
- ⦿ Modular approach: Only Radiated Performance tests are executed on the device. Evidences of compliance to RF & Protocol specifications are inherited from a Sigfox Verified modular design (module or ref design).

EMITECH labs offers a wide range of test services like EMC, radio (EN 300 220, FCC and a lot more standards) and electrical safety tests. If you are interested in, please [download and complete our dedicated questionnaire](#).







In addition, Emitech Group offers you a complete range of qualification tests in the mechanical fields (shock, vibration, endurance, earthquake ...), climatic (hot, cold, humidity, VRT ...), physico-chemical (IP, sunshine, fire ...) but also acoustic and hydraulic. Feel free to send us your request at the following address: contact@emitech.fr

General Information	Applicant company	Name :
		Address :
	Intra-Community VAT	
	Applicant contact	Name:
		e-mail:
		Phone :
	Manufacturer company (if different)	Name:
	Address:	
Product name		
Intended use / type of application		
Expected product(s) weight (with packing)	<input type="checkbox"/> <5kg <input type="checkbox"/> >5kg but <10kg <input type="checkbox"/> >10kg (please specify) :	

Which Sigfox certification can EMITECH help you to obtain?

- Sigfox Ready: Sigfox Radiated Performances tests
 Sigfox Verified: Sigfox RF & Protocol tests

Geographical zones	Quantity	Geographical zones	Quantity
RC1		RC1	
RC2		RC2	
RC3		RC3	
RC4		RC4	
RC5		RC5	
RC6		RC6	

 RC1 – 868.13 ;
  RC2 – 902.2 ;
  RC3 – 932.2
 RC4 – 920.8 ;
  RC5 – 923.3 ;
  RC6 – 865.2

Technical information

Power Supply of product to be tested

- Internal battery
- External power supply:
- Other :

Voltage Level (in V)

Firmware version

Hardware version

Antenna type

- ½ wave
- ¼ wave
- Wire
- Ceramic
- PCB
- Fractal
- Other :

Antenna gain

Sigfox Ready

Describe how to turn on and off the continuous wave (unmodulated CW). It must be detailed and simple:

Please provide 1 or, if possible, 2 samples of products.

Device maker must provide a way to test the radiated power in Uplink using the CW test mode. A device set in CW test mode shall emit:

- continuously
- with a single carrier frequency
- with no modulation and no interruption of the power signal

Feel free to tell us the parameters to configure your equipment if AT Commands are required. (Please also provide the USB PORT)

Photos for Sigfox Ready

Device photo

Photo of end product in normal use position in the applicative environment as declared by the provider

Photo or schematic of end product position for effective radiated power measurement in laboratory.

Be aware that this position will determine the Sigfox class of the product

Sigfox Verified	Tx power variable? <input type="checkbox"/> No <input type="checkbox"/> Yes Specify: _____
	Power supply: Define the voltage range (Minimum, Medium and Maximum) <i>If voltage values are identical (e. g. min=medium), give a reason with detailed explanations.</i> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
	Oscillator specifications : <i>Frequency drift (ppm) versus aging on 5 years versus operating temperature :</i> <div style="border: 1px solid black; height: 60px; width: 100%;"></div> <i>(provide the datasheet of the local oscillator)</i>
	A certificate that the RSSI (Received Signal Strength Indication) is calibrated to +/- 2dB. If not, explain why and give the adjustment procedure: <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
	Provide a device communication interface: USB/RS23, USB/μUSB...
	Provide the Tx and Rx frequency calibration procedure in order to calibrate the device if needed during the test.
	Provide equipment with RF SMA connector or other if converter to SMA provided.

Please be sure to meet the prerequisites of the guide provided by Sigfox:

<https://support.sigfox.com/docs/be-prepared-sigfox-verified-certification>