

NILE Series

BT 5.0 + 802.15.4 Module

Regulatory Compliance

Version 1.0

1 Overview

This document describes the NILE series module certifications and declarations. It also describes the requirements for the module integrators and end device manufacturers to leverage these certifications.

NILE modules hold full modular approvals and are certified for FCC, IC and CE/ETSI for use in USA, Canada and Europe respectively. End product manufacturers can inherit the module approvals for compliance testing of their device by strictly following Grantee's compliance guidelines for module integration and operation and can avoid further testing of module transmitter function.

2 FCC Compliance

NILE series modules are intended for OEM integrators only. These integrators should make sure that the end product using NILE series module uses only authorized antennas and is compliant to all rules. End user manual shall include all the required regulatory information given in this manual.

2.1 FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

§15.21 Information to user:

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2.2 RF Exposure compliance statement

This Module complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other

antenna or transmitter except in accordance with FCC multi-transmitter guidelines.

2.3 Labelling Instruction for Host Product Integrator

Please notice that if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following:

“Contains FCC ID: 2AYLDI54” or

“Contains Transmitter Module FCC ID: 2AYLDI54”

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

§ 15.19 Labelling requirements shall be complied on end user device.

Labelling rules for special device, please refer to *§2.925*, *§ 15.19 (a)(5)* and relevant KDB publications. For E-label, please refer to *§2.935*.

2.4 Installation Notice to Host Product Manufacturer

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.

Important Note:

The module is limited to installation in mobile application, a separate approval is required for all other operating configurations, including portable configurations with respect to *§2.1093*, co-location with another transmitter and difference in antenna configurations.

2.5 Antenna Change Notice to Host product manufacturer

Module integrators can use their own antenna but must ensure it is of same type and of equal or less gain as of certified antenna. No retesting of this system configuration is required. Refer to FCC Part 15.20 (c)(4).

If you desire to increase antenna gain and either change antenna type or use same antenna type certified, a Class II permissive change application is required to be filed by us, or you (host manufacturer) can take responsibility through the change in FCC ID (new application) procedure followed by a Class II permissive change application. See *§2.1043*. Contact Ivativ representative before adding different antennas.

2.6 FCC other Parts, Part 15B Compliance Requirements for Host product manufacturer

This modular transmitter is only FCC authorized for the specific rule parts listed on our grant, host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

Host manufacturer in any case shall ensure host product which is installed and operating with the module is in compliant with Part 15B requirements.

Additionally, investigative spot check measurements are strongly recommended to verify the full system compliance after module integration and operating in intended use case. For more information on end product test guidance please check KDB 996369 D04 Module Integration Guide V02.

3 IC

NILE series modules comply with Industry Canada's License exempt Radio Standards Specifications (RSS) when operated with the antenna types listed in this document. Antenna types not certified with this module or antenna having gain greater than the maximum gain of listed antenna are strictly prohibited to use with this device.

3.1 ISED compliance statement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

3.2 ISED Radiation Exposure statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Cet équipement est conforme aux limites d'exposition aux radiations IC CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with Industry Canada's multi-transmitter guidelines.

3.3 End Product Labeling instruction

Final end product into which this module is integrated must be labeled in visible area with the following:

"Contains IC: 26840-I54" or

“Contains Transmitter Module IC: 26840-I54”

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :

- (1) L’appareil ne doit pas produire de brouillage;
- (2) L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

4 CE

NILE series modules comply with essential requirements and other relevant requirements of the Radio Equipment Directive (RED) 2014/53/EU. Module integrators and end product makers must make sure that their RF output power is less than 10 dBm EIRP. In European market, it is the end product manufacturer who is ultimately responsible for the compliance of their device.

For more information on EU regulatory compliance of NILE series modules, please see NILE series Declaration of Conformity. Test reports are available on request.

5 Pre-Approved antennas

NILES series modules are certified with integrated PCB antenna and the following dipole antennas.

Item #	Part Number	Manufacturer	Description	Gain
1	GW.59.3153	Taoglas	2.4GHz/5.1~5.85GHz RP_SMA male dipole antenna. 50 Ohm impedance	3dBi