



KINEIS

11 rue Hermès
31520 Ramonville-Saint-Agne
France

The :
May 30th, 2023

To:
TUV SUD BAPT UNLIMITED (TCB),
Octagon House,
Concorde Way
Segendwhorth North,
Fareham,
Hampshire
P015 5RL

Object : **Request for a Limited Modular Transmitter Approval**
FCC ID : **2A96E-KIM1-HW1-5**

<u>Modular Approval Requirement</u>	<u>Requirement met</u>
<p>The radio elements must have the radio frequency circuitry shielded. Physical/discrete and tuning capacitors may be located external to the shield but must be on the module assembly.</p> <p>A metal shield covers all the module components.</p>	YES
<p>The module must have buffered modulation/data inputs to ensure that the device will comply with the Part 15 requirements with any type of input signal.</p> <p>The module doesn't include any buffer, if payloads are submitted to the module too quickly the data are lost.</p> <p>The host must manage the transmission rate knowingly.</p>	YES
<p>The module must contain power supply regulation on the module.</p> <p>The module is regulated for microcontroller and transceiver parts but not for amplifier part. However, depending on a variable input voltage, the module can't increase the power beyond the max declared value without breaking, only a lower power could occurred in case of under-voltage.</p>	YES
<p>The module must contain a permanently-attached antenna, or contain a unique antenna connector, and be marketed or operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b).</p> <p>The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA.</p>	YES
<p>The module must demonstrate compliance in a stand-alone configuration.</p> <p>The module has been tested in a standalone configuration (interface board offering only connectors) making evident a proper working in respect of the specifications.</p>	YES
<p>The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling requirements).</p> <p>The module has permanent label affixed on the shield giving the minimum information required. The complement is present in the user manual.</p>	YES
<p>The module must comply with all specific rules applicable to the transmitter. The grantee must provide comprehensive instructions to explain compliance requirements.</p>	YES

The module is released with a complete technical documentation, datasheet-integration manual-operational description.	
<p><i>The module must comply with RF Exposure requirements. For any transmitters intended for use in portable devices, SAR compliance must be demonstrated to be independent of the host device. See KDB Publication 447498 item 2 as a guide to determine if a transmitter can be tested without being limited to a host device. If SAR can only be demonstrated in specific host types or platforms, then the module type must be limited.</i></p> <p>The SAR exemption has been demonstrated by a certified laboratory, based on a maximum of 1W injected into an antenna of 2.2dBi at minimum 20cm with a maximum duty cycle of 0.7%</p>	<p>YES</p>

Statements:

Kinéis applies for a limited modular approval particularly because the antenna can be changed however done by a professional only. Kinéis demonstrated during the test a compliance against applicable limits with the most efficient antenna considering the use case. Integrators of this module keen to benefit of the Kinéis approval should select a less efficient antenna (inferior max gain).

By:
 Vincent GAMONAL
 Certification engineer

