



KINEIS

11 rue Hermès 31520 Ramonville-Saint-Agne France

On: January 17th, 2024

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

Object : Request for a Limited Modular Transmitter Approval

FCC ID : 2A96E-KIM2-HW1FW1



<u>Modular Approval Requirement</u>	<u>Requiremer</u>
	<u>met</u>
The radio elements must have the radio frequency circuitry shielded.	YES
Physical/discrete and tuning capacitors may be located external to the	
shield but must be on the module assembly.	
A metal shield covers all the module components.	
The module must have buffered modulation/data inputs to ensure that the	YES
device will comply with the Part 15 requirements with any type of input	
signal.	
The module stores the data before transmitting over the air always	
respecting the Kinéis protocol, meaning the transmissions never occurs	
in less than 60 seconds.	YES
The module must contain power supply regulation on the module.	TES
The module integrates some regulators to ensure a proper 3.3V for	
internal functions and a DC-DC component able to provide a 5V	
whichever the input voltage supply in the range [3.3-5V], maintaining a	
constant power level in RF output.	
The module must contain a permanently-attached antenna, or contain a	NO
unique antenna connector, and be marketed or operated only with specific	
$r = t_{a} = r = (a) = r = 0.007 + 10.07 + 10.007 + 10.007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0007 + 10.0$	
antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b).	
The antenna configuration / swapout is by professional installation only,	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA.	VEO
The antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(d), 2.929(b). The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration.	YES
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA.	YES
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working	YES
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications.	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use	YES
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications.	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling requirements). The module has permanent label affixed on the shield giving the minimum information required. The complement is present in the user	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling requirements). The module has permanent label affixed on the shield giving the minimum information required. The complement is present in the user manual.	
The antenna configuration / swapout is by professional installation only, possibly using SMA connector, not RP-SMA. The module must demonstrate compliance in a stand-alone configuration. The module has been tested in a standalone configuration (interface board offering only some connectors) demonstrating a proper working in respect of the specifications. The module must be labelled with its permanently fixed FCC ID label, or use an electronic display (See KDB Publication 997198 about labelling requirements). The module has permanent label affixed on the shield giving the minimum information required. The complement is present in the user	YES





The module is released with a complete technical documentation, datasheet-integration manual-operational description.	
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. The calculations show that the individual transmitters comply with FCC 1.307(b)(3)(i)(C) MPE-based exception at a minimum distance of 20 cm.	YES

Statements:

Kinéis applies for a limited modular approval only because the antenna is not permanently attached. However, the change can be done by a professional only. Kinéis has demonstrated the compliance with two antennas. The module integrators keen to benefit of the Kinéis approval shall use the same antennas or of same type, even or less efficient.

By: Vincent GAMONAL Certification engineer

Jamona

