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26<sup>th</sup> March 2019

Telecommunication Certification Body  
UL VS Ltd  
Unit 3, Horizon  
Wade Road  
Kingsland Business Park  
Basingstoke  
Hampshire  
RG24 8AH  
United Kingdom

Subject: FCC Single-Modular Approval Letter  
FCC ID: SEAMOD31

To whom it may concern

We, Ubisense America LLC hereby declare that the product, FCC ID: SEAMOD31, has met the single-modular approval requirements of FCC rule part §15.212(a)(1) and this is shown in the table below.

<b>Requirement</b>	<b>Compliance: Yes or No along with a justification</b>
The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly	<b>Yes.</b> The SEAMOD31 device is equipped with a metal RF shield enclosure that is connected to the PCB and physically encompasses the entire RF circuit, including the frequency-determining element.
The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal	<b>Yes.</b> All data inputs to the SEAMOD31 device are buffered, interfaced and controlled by the on-board microcontroller. There are no direct connections between the external interfaces of the module and the modulation circuits within the radio, and so the radio will never experience excessive data rates or over-modulation.
The module must contain power supply regulation on the module	<b>Yes.</b> The SEAMOD31 device receives power

	from the host system. The 2.3-5.25V input power rail is filtered and regulated on board the SEAMOD31 device to generate an internal 2.1V domain. The power regulation topology may be seen in the block diagram attached to this application.
The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b)	<b>Yes.</b> The SEAMOD31 device has two integral antennas, a UWB antenna and a 2.4GHz antenna. Both are permanently attached to the module PCB.
The module must demonstrate compliance in a stand-alone configuration	<b>Yes.</b> The SEAMOD31 device was able to be tested in a standalone configuration where only power was supplied by feed wires. There were no ferrites located on the power supply feed lines.
The module must be labelled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labelling requirements)	<b>Yes.</b> The SEAMOD31 device will be labelled as "FCC ID: SEAMOD31" on the module's RF shield. Examples of the labelling used on the module are included in the submitted package. The User's Manual also outlines the labelling requirements when embedding this module.
The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee	<b>Yes.</b> The local microcontroller contained on the SEAMOD31 device controls all parameters critical to meeting the requirements of Part 15. Users who will be integrating this module into their own devices will not have the capability to operate the module outside of the Part 15 requirements.
The module must comply with RF exposure requirements	<b>Yes.</b> There are no RF exposure requirements for wideband devices operating under Part 15.250, or for 2.4GHz devices operating under Part 15.249 of the FCC Rules and Regulations.

Yours faithfully,



Dr Andy Ward FREng  
Chief Technology Officer  
Ubisense Limited and Ubisense Americas LLC