

Federal Communications Commission
Equipment Authorization Division
7435 Oakland Mills Road
Columbia, MD 21046
USA

Date: Nov 28th, 2023.

Subject; **Modular Transmitter Application**

Company name: JADAK, a business unit of Novanta Corporation
FCC ID: QV5MERCURY7EH

Dear Sir/Madam,

This letter includes the FCC application requirements for Modular Transmitter Approval Request for;-

FCC KDB 996369 D01 'Module Certification Guide v02; and
FCC KDB 996369 D03 OEM Manual v01

In accordance with 47CFR 15.212 Modular Transmitters and KDB 996369 D01 'Module Equip Auth Guide v02'. FCC ID QV5MERCURY7EH has been examined against the following requirements.

Requirement per 15.212 and KDB 996369 D01	Explanation from Grantee (do not write yes/no, but explain why product complies/how it is achieved)
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.	Yes, the radio frequency circuitry is shielded to prevent interference and maintain signal integrity.
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.	Yes, buffered modulation/data inputs ensure compliance with Part 15 requirements by stabilizing input signals, preventing interference.
The module must contain power supply regulation on the module.	Yes, including power supply regulation on the module ensures stable and consistent power delivery, safeguarding against voltage fluctuations and ensuring proper functionality.
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 §§ 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b).	M7E-HECTO is a solder-down module and therefore requires a unique antenna connector or a permanently attached antenna. The only way to attach an antenna is to design a custom printed circuit board and provide on-board routing to a customer specified antenna connector. Section 5.7 of the User Guide instructs the host product manufacturer that they must provide a permanently attached antenna or a unique connector.
The module must demonstrate compliance in a stand-alone configuration.	Yes, compliance in a stand-alone configuration ensures the module functions independently and meets regulatory or

	operational standards without relying on external systems.
The module must be labeled with its permanently affixed FCC ID label, or use an electronic display (see KDB Publication 784748).	Yes, this requirement ensures compliance with FCC regulations by clearly identifying the module with its FCC ID label, allowing for easy identification and verification.
The module must comply with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee.	Yes, it's crucial to adhere to the specific rules and integration instructions outlined by the grantee for the module's transmitter.
The module must comply with RF exposure requirements	Yes, ensuring compliance with RF exposure requirements is crucial to prioritize user safety and limit potential health risks associated with electromagnetic radiation

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Integration Instructions for host product manufacturers

The following items are submitted in support of application for Modular Transmitter FCC ID as noted above as required by the FCC KDB 996369 D03 OEM Manual v01.

These items are provided as integration instructions for host product manufacturers (e.g., OEM instruction manual) to use when integrating a module in a host product.

Any requirements that are not applicable to the Module are as indicated below.

Summary of requirements and Checklist. Refer to the KDB for description of the complete requirements;

KDB Ref Sect	Requirements of KDB 996369 D03	User Manual Page Number reference
2.2	List of applicable FCC rules	Section 10, Page No; 39
2.3	Summarize the specific operational use conditions	All of Section 10, page 39
2.4	Limited module procedures	NA – this is not a Limited Grant
2.5	Trace antenna designs	Section 5.8.2, page 21
2.6	RF exposure considerations	Section 10.1, Page No; 39
2.7	Antennas	Section 5.7, Page 18
2.8	Label and compliance information	Section 10.1.1.1 & 10.1.1.2 Page No; 40
2.9	Information on test modes and additional testing requirements	First Sentence of Section 5.8, Page No 19
2.10	Additional testing, Part 15 Subpart B disclaimer	Section 5.8, Page No; 19

Name: Bharathi Peddi

Date: Nov 28th ,2023

Title: President, BLYK Engineering Services Inc. on behalf of JADAK, a business unit of Novanta Corporation.

Signature of applicant

Robert D. Pedoli

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