## Request for Modular/Limited Modular Approval

Dat	e: May 26, 2025			
Sub	oject: Manufacturer's Declaration for □ - Modular Approval □ - Split Modular Split □ - Limited Modular Approval □ - Limited Split		approval	
Coı	nfidentiality Request for:2BN8IUNIRC7PRORFMD			
	8 Basic Requirements – FCC Part 15.212(a)(1) For Items Marked "NO(*)", the Limited Module Description Must be Filled Out on the Following Pages			
	Modular Approval Requirement	Require	ment Met	
1.	The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with FCC limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation. The physical crystal and tuning capacitors may be located external to the shielded radio elements. 15.212(a)(1)(i)	⊠ - YES	□ - NO(*)	
	Yes, the products have a shield, Physical components and tuning capacitor(s) are assembly to the module shield.	and located in	nternal to the	
2.	The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with FCC requirements under conditions of excessive data rates or over-modulation. 15.212(a)(1)(ii)	⊠ - YES	□ - NO(*)	
	Yes, The module has buffered modulation/data inputs to ensure that the device will comply with Part 15 of input signal.	requirements	with any type	
3.	The modular transmitter must have its own power supply regulation on the module. This is intended to ensure that the module will comply with FCC requirements regardless of the design of the power supplying circuitry in the device into which the module is installed. 15.212(a)(1)(iii)	⊠ - YES	□ - NO(*)	
	Yes, The modular transmitter has its own power supply regulation.			
4.	The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b), 15.204(c), 15.212(a), and 2.929(b). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of § 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph 15.212(b). 15.212(a)(1)(iv)	⊠ - YES	□ - NO(*)	
	Yes, The module contains Omnidirectional Antenna, Directional Antenna(Rod-shaped) and Directional Antenna(Double-layer board).			
5.	The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified or commercially available (see Section 15.31(i)). 15.212(a)(1)(v)	⊠ - YES	□ - NO(*)	

Yes, The module demonstrates compliance in a stand-alone configuration.

	Modular Approval Requirement	Requirement Met	
6.	The modular transmitter must be labeled with its own FCC ID number, or use an electron display (see KDB Publication 784748).  If using a permanently affixed label with its own FCC ID number, if the FCC ID 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 Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.  If the modular transmitter uses an electronic display of the FCC identification number, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the module is installed inside another device, then the outside of the device into which the module is installed must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC certified transmitter module(s)." Any similar wording that expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization. 15.212(a)(1)(vi)	⊠ - YES	□ - NO(*)
	Yes, The module is labelled with its permanently affixed FCC ID label.		
7.	The modular transmitter must comply with all specific rule or operating requirements applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured. 15.212(a)(1)(vii)	⊠ - YES	□ - NO(*)
	Yes, The module complies with all specific rules applicable to the transmitter including all the conditions instructions by the grantee.	s provided in t	he integration
8.	The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance. 15.212(a)(1)(viii)	⊠ - YES	□ - NO(*)
	Yes, The module complies with RF exposure requirements.		

#### **Limited Module Description – When Applicable**

\* If a module does NOT meet one or more of the above 8 requirements, the applicant may request Limited Modular Approval (LMA). This Limited Modular Approval (LMA) is applied with the understanding that the applicant will demonstrate and will retain control over the final installation of the device, such that compliance of the end product is always assured. The operating condition(s) for the LMA; the module is only approved for use when installed in devices produced by grantee. A description regarding how control of the end product, into which the module will be installed, will be maintained by the applicant/manufacturer, such that full compliance of the end product is always ensured should be provided here.

Details: <example - N/A>

Software Considerations – KDB 594280 / KDB 442812 (One of the following 2 items must be applied)			
Requirement	Requirement Met		
<ol> <li>For <u>non-Software Defined Radio</u> transmitter modules where software is used to ensure compliance of the device, technical description must be provided about how such control is implemented to ensure prevention of third-party modification; see KDB Publication 594280.</li> </ol>	□ - Provided in Separate     Cover Letter	□ - N/A	
<ol> <li>For <u>Software Defined Radio (SDR)</u> devices, transmitter module applications must provide a software security description; see KDB Publication 442812.</li> </ol>	☐ - Provided in Separate Cover Letter	⊠ - N/A	

Split Modular Requirements				
Requirement	Provided in Manual			
<ol> <li>For split modular transmitters, specific descriptions for secure communications between front-end and control sections, including authentication and restrictions on third-party modifications; also, instructions to third-party integrators on how control is maintained.</li> </ol>	☐ - Provided in Separate Cover Letter	⊠ - N/A		

OF	M Integration Manual Guid	dance – KDB 996369 D03 Section 2			
Clear and Specific Instructions Describing the Conditions, Limitations, and Procedures for third-parties to use and/or integrate the module into a host device.					
	The purview to use unity of in-				
Requirement					
		☐ - No,	n ontionally shapes to not		
		If No, and LMA applies, the applicant ca make the following detailed info public.			
Is this module intended for		to be basic integration instructions for	a users manual and the		
sale to third parties?	⊠ - YES	information below must still be inclu			
		description. If the applicant wishes to ke this will require a separate statement co			
		module is not for sale to third partie	s and that integration		
Itom	as we swimed to be in the many	instructions are internal confide ual – See KDB 996369 D03, Section 2	ntial documents.		
		ormation to be in the installation manual.	Modular transmitter		
applicants should include informat	ion in their instructions for	all these items indicating clearly when the	y are not applicable. For		
		Not Applicable". Also if a module is limite structions may not need to be detailed and			
		t this should include a cover letter as cited			
1. List of applicable FCC rules. K					
•	lated to the transmitter.	200 D02 Sti 2 2			
<ol> <li>Summarize the specific operation</li> <li>a. Conditions such a</li> </ol>		oss, reduction of power for point to point			
systems, professi	onal installation info	ss, reduction of power for point to point			
3. Limited Module Procedures. KI					
a. Describe alternat limiting condition		es to verify the host meets the necessary			
		ate how control will be maintained such			
	is ensured, such as Class II for	new hosts, etc.	the left are provided in the Modular Integration		
<ol> <li>Trace antenna designs. KDB 99</li> <li>a. Layout of trace d</li> </ol>		nectors, isolation requirements, tests for	Guide (or UM) for Full		
		ures for ensuring compliance. If	Modular Approval (MA) or LMA.		
		itial must be identified and information	Of LIVIA.		
provided in the o  5. RF exposure considerations. KD	perational description.		☐ - An LMA applies		
		w host manufacturers to use the module.	and is approved ONLY		
Two types of inst	tructions are necessary: first to	the host manufacturer to define	for use by the grantee in		
	le, portable – xx cm from bod nd user in the host product ma	y) and second additional text needed to be	their own products, and not intended for sale to		
6. Antennas. KDB 996369 D03, So		muais.	3 <sup>rd</sup> parties as provided in		
<ul> <li>a. List of antennas i</li> </ul>	included in the application and	d all applicable professional installer	a separate cover letter.  Therefore the		
		shall also identify the antenna types	information shown to the		
7. Label and compliance informati		i-directional" is not considered a type) n 2.8	left is found in the		
<ul> <li>a. Advice to host in</li> </ul>	tegrators that they need to pro	ovide a physical or e-label stating	theory of operation.		
"Contains FCC I.  8. Information on test modes and a	D: " with their finished productional testing requirements				
		tion by host integrators including			
clarifications nec	essary for stand-alone and sin	nultaneous configurations.			
b. Provide informat 9. Additional testing, Part 15 Subp	ion on how to configure test n				
9. Additional testing, Part 13 Subp	art b discialilier. KDb 99050	9 D05, Section 2.10			
Sincerely,					
		Xiaojan Dai			
Dru V' D'	/ Contification F	Vive Jan, A			
	/ Certification Engineer _ture/Title <sup>1</sup> )	- — — — — — — — — — — — — — — — — — — —			
(Signa	iuic/ i iuc )	(1 min manne)			

<sup>&</sup>lt;sup>1</sup> - Must be signed by applicant contact given for applicant on the FCC site, or by the authorized agent if an appropriate authorized agent letter has been provided. Letters should be placed on appropriate letterhead.