Single Modular Approval Requirements  1 The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.  2 The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-	ly (Y/N)
Section 15.212 Modular Transmitters   Request for Modular Approval   Requirements   EUT Conditions   Complements   EUT Conditions   Complements   EUT Conditions   Complements   EUT Conditions   Complements   OK   Y      The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.   OK   Y    2 The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-	ly (Y/N)
Request for Modular Approval   Request for Limited Modular Approval   EUT Conditions   Complements   EUT Conditions   Complements	ly (Y/N)
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15 requirements under conditions of excessive data rates or over-	
excessive data rates or over-	
modulation.	
3 The modular transmitter must have its A DC-DC converter is configured for Y	
own power supply regulation. internal supply of the module.	
4 The modular transmitter must comply Connected to antenna with internal Y	
with the antenna and transmission transmission line and matching.	
system requirements of Sections	
15.203, 15.204(b) and 15.204(c). 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 Section 15.203 is not applicable to	
modules but can apply to limited	
modular approvals under paragraph	
(b) of this section.	
5 The modular transmitter must be OK Y	
tested in a stand-alone configuration,	
<i>i.e.</i> , the module must not be inside	
another device during testing for	
compliance with Part 15	
requirements. 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	

	T	T	
	contain ferrites, unless they will be		
	marketed with the module (see		
	Section 15.27(a)). The length of these		
	lines shall be the 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		
	and commercially available (see		
	Section 15.31(i)).		
6	The modular transmitter must be	Mark the FCC-ID certification number	Y
	equipped with either a permanently	on the module label.	
	affixed label or must be capable of	011 0110 00110 1010 011	
	electronically displaying its FCC		
	identification number.		
	(A) If using a permanently affixed label, the modular transmitter must be labeled with its		
	own FCC identification number, and, if the		
	FCC identification number 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.		
	(B) 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.		
7	The modular transmitter must comply	Module usage manuals were provided.	Y
	with any specific rules or operating		
	requirements that		
	ordinarily apply to a complete		
	transmitter and the manufacturer must		
	provide adequate instructions along		
	with the module to explain any such		
	requirements. A copy of these		
	instructions must be included in the		
	application for equipment		
	authorization.		
8	The modular transmitter must comply	For RF exposure requests, ensure that	Y
	with any applicable RF exposure	RF specs are entered and adhered to	
	requirements in its final	within the approval source provided to	
	configuration.	all users fo this module.	

A **limited modular approval** may be granted for single or split modular transmitters that do not comply with all of the above requirements, *e.g.*, shielding, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment authorization that the modular transmitter meets all the applicable Part 15 requirements under the operating conditions in which the transmitter will be used. Limited modular approval also may be granted in those instances where compliance with RF exposure rules is demonstrated only for particular product configurations. The applicant for certification must state how control of the end product into which the module will be installed will be maintained such that full compliance of the end product is always ensured.