

nt/Grantee	Panasonic Co	prporation of North	America	
15.212 Modular	r Transmitters			
t for Modular A	pproval	☐ Request for	Limited Modular Approval	
Requirements	<u> </u>		EUT Conditions	Comply (Y/N)
have their own tuning capacito	shielding. The	physical crystal and	The device does not have Metal shielding to cover RF section. Refer to External Photos.	N
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-modulation.			All inputs to the device are buffered through logic U1 inputs. Refer to Schematic Diagram.	Y
The modular transmitter must have its own power supply regulation.			There is no power supply in the module. 3.3V is fed by the final product.	N
antenna and tr Sections 15.20 antenna must employ a "u connections be including the ca provision of S modules but	ansmission sys 03, 15.204(b) either be perminique" antenn tween the mod able). The "prof fection 15.203 can apply to	tem requirements of and 15.204(c). The nanently attached or na coupler (at all ule and the antenna, ressional installation" is not applicable to o limited modular	The device is equipped with the unique antenna connector. Refer to External photos.	Y
alone configurationside another of with Part 15 remodule will be with the AC line Section 15.207 input/output line not contain fer with the module of these lines is use or, if the centimeters to between the calculation of the calculations and equipment. Any equipment comes all be unmoderate to be the calculations of the calculations and the calculations are supported by the calculations of the calculations of the calculations are supported by the calculations of	ation, <i>i.e.</i> , the edevice during to equirements. Use battery powerne conducted reference of the conducted reference of the connected rites, unless that the end of the most accessories, ponected to the modified and conducted to the modified to the modified and conducted to the modified and conducted to the modified to	module must not be esting for compliance inless the transmitter red, it must comply equirements found in lower lines and data to the module must ey will be marketed 15.27(a)). The length eight typical of actual known, at least 10 here is no coupling dule and supporting eripherals, or support nodule during testing		N
	Requirements Modular Appro The radio elem have their own tuning capacite shielded radio of The modular modulation/dat to ensure that t requirements u rates or over-m The modular t supply regulation The modular t supply a "u connections be including the cap provision of S modules but approvals unde The modular tr alone configurat inside another of with Part 15 r module will be with the AC lin Section 15.207 input/output lin not contain fer with the modul of these lines of use or, if that centimeters to between the c equipment. Any equipment con shall be unmod	The modular transmitter must supply regulation. The modular transmitter must antenna and transmission sys Sections 15.203, 15.204(b) antenna must either be permemploy a "unique" antenna connections between the modincluding the cable). The "profiprovision of Section 15.203 modules but can apply the approvals under paragraph (b). The modular transmitter must alone configuration, i.e., the inside another device during the with Part 15 requirements. Unmodule will be battery power with the AC line conducted respection 15.207. AC or DC prinput/output lines connected not contain ferrites, unless the with the module (see Section of these lines shall be the len use or, if that length is uncentimeters to insure that the between the case of the more equipment. Any accessories, pequipment connected to the more equipment	Is.212 Modular Transmitters tor Modular Approval Requirements Modular Approval Requirements 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. 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-modulation. The modular transmitter must have its own power supply regulation. The modular transmitter must comply with the antenna and transmission 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. The modular transmitter must be tested in a standalone configuration, i.e., 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 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	15.212 Modular Transmitters for Modular Approval

Panasonic

6	The modular transmitter must be equipped with	The proposed FCC ID label	Y
	either a permanently affixed label or must be	format is to be placed on the	•
	capable of electronically displaying its FCC	module. If FCC ID is not visible	
	identification number.	when the module is installed into	
	(A) If using a permanently affixed label, the		
		the system, "Contains FCC ID:	
	modular transmitter must be labeled with its own	ACJ9TGRI20A" shall be placed	
	FCC identification number, and, if the FCC	on the outside of final host system.	
	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 with any	Refer to "User's Guide" Exhibit	Y
,	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.		
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8	The modular transmitter must comply with any	-	
	applicable RF exposure requirements in its final	exposure compliance requirement	
	configuration.		

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.