

Applica	nt/Grantee	Atmel Norway AS				
FCC ID		VW4A090668				
Section 15.212 Modular Transmitters						
Request for Single Modular Approval			Request for Limited Single Modular approval			
SI.no	Requiremen	nts		EUT Conditions	Comply (Y/N)	
01	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 Module has its own shielding. Shield can be employed on the Board structure. Refer EUT External Photos.	Y	
02	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 Modulation and data input(S) are buffered. Refer Block diagram and schematic Diagram.	Y	
03	The modular transmitter must have its Own power supply regulation.			The AT86RF230 RF transceiver IC has internal regulator as shown in the internal block diagram. Refer Appendix 5_Block diagram.	Y	
04	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.			Refer Appendix 9_User Manual and Antenna data Sheet.	N	
05	The modular transmitter must be tes 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 line and data input/output lines connected the module must not contain ferrites, unless they will be marketed with the Module (see Section 15.27(a)). The		ne ne n es d to	Refer Appendix 1_Test setup Photos	Y	



	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)).		
	\ / /	Labal with ita avea FOO ID	
	The modular transmitter must be	Label with its own FCC ID	
	equipped with either a permanently	number. Refer Appendix	
	affixed label or must be capable of	4_Label Diagram.	
	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		
1	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.		
06	The Grantee may either provide such a		Υ
	label, an example of which must be		•
	included in the application for equipment		
	authorization, or, must provide adequate		
1	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		
1	1 7		
	electronic		
	display of the FCC identification number,		
1	the		
	information must be readily accessible and		
	visible on the modular transmitter or on the		
1	Device in which it is installed. If the module		
	is installed inside another device, then the		
1	outside of the device into which the module		
	is installed must display a label referring to		
1	the enclosed Module. This exterior label can		
1	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.		
07	The modular transmitter must comply 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.	Refer Appendix 9_User manual.	Y
08	The modular transmitter must comply with any applicable RF exposure requirements in its final configuration	Refer Appendix 10_Maximum Permissible Exposure Information.	Y

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

Sincerely,

Saravanakumar Marudhachalam

Staff Engineer,

Atmel Norway AS