

Applicant/Grantee Qolsys Inc.						
FCC ID: 2AAJXQS-SRF319H						
Section 15.212 Modular Transmitters						
Request		est for Limited Modular Approval				
	Requirements	EUT Conditions	Comply (Y/N)			
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.	Shielding is provided by a metal shield over circuitry.	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-modulation.	All modulation and data inputs are buffered by circuitry on the transmitter chip.	Y			
3	The modular transmitter must have its own power supply regulation.	Si4463 Transmitter provides its own LDO voltage regulators for core operation. From Si4463 Datasheet, Section 9: "+1.8 to +3.6 V Supply Voltage Input to Internal Regulators."	Y			
4	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.	External antenna The antenna is permanently attached (secured by bracket to final product during installation). Additionally it is connected via u.fl connector and only installed at factory (i.e. not intended for user replacement or installation)	N			
5	The modular transmitter must be 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 contain ferrites,	Testing was performed with the module extended outside of the host on a special extender board, as shown in the test setup photos.	Y			

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	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	Module will have its own permanently	Y
	equipped with either a permanently	affixed label displaying its FCC-ID.	
	affixed label or must be capable of	When installed inside another device,	
	electronically displaying its FCC	module label cannot be seen.	
	identification number.	Therefore, the host device will also	
	(A) If using a permanently affixed label, the	·	
	modular transmitter must be labeled with its	display a label referring to the enclosed	
	own FCC identification number, and, if the	module.	
	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 ECC contilled transmitter		
	"Contains FCC certified transmitter modula(s)" Any similar wording that expresses		
	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.		
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7	The modular transmitter must comply with any specific rules or operating	The module complies fully with the operating requirements of Part 15	Y
	requirements that	Subpart C (15.231) as demonstrated in	
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	ordinarily apply to a complete	the test report exhibit.	
	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	Shielding is provided by a metal shield	Y
	with any applicable RF exposure	over circuitry.	
	requirements in its final 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.