

Security Solutions & Services Division

Centre du Bois des Bordes - BP 57 91229 Brétigny-sur-Orge Cedex France

Tel.: +33 (0)1 69 88 52 00 Fax: +33 (0)1 60 84 82 30 www.thalesgroup.com

To: Curtis-Straus LLC
Certification Department
527 Great Road
Littleton, MA 01460

Limited modular approval letter

Dear application examiner,

THALES TRASPORTATION SYSTEMS, would like to have your authorization as a limited modular approval on the TXV4READER with FCC ID: V33TXV4READER and IC: 7678A-TXV4READER. The requirements of CFR 47 part 15.212 and RSS-Gen part 7.1.1 & 7.1.2 have been checked and shown in the following statement,

Modular approval requirement	Applicant's answer
Justification for Limited modular approval	The TXV4READER module will only be installed in THALES end products under their control. Some control measurements are performed on one of each kind of host equipments to ensure the compliance for both intentional and unintentional emission requirements. See user manual.
The module must be a complete radio transmitter with its own reference oscillator, antenna, etc. The only connectors to the module, if any, are power supply and modulation/data inputs.	The module is a complete radio transmitter, see Bloc-Diagram.PDF
Have its own RF shielding	The equipment has no shielding. The final host equipments are manufactured by THALES.
Have buffered modulation/data inputs (if such inputs are provided)	The data inputs are connected to the mother board of the host equipments from THALES. The inputs are not buffered.
Have it own power supply regulation	The equipment has no power supply regulation, but a regulation is made by the mother board of the host equipments from THALES

THALES

Modular approval requirement	Applicant's answer
Meet the antenna requirements of Section 15.203 and 15.204 (c)	The radio module and its antenna are only integrated in THALES host equipments, so other antenna can't be used. This radio module is authorized with the three antennas described in the user manual: antenna 61785069, antenna 61988246, and antenna 2447-609-400. The requirements for emission measurements are given in the reports: 81575-571409A, 81575-571409B and
	81575-571409C
Be tested in a stand-alone configuration, i.e., the antenna, AC or DC power and data input/output lines must be connected to the module but, the module must not be inside another case during testing	Equipment tested in stand-alone, see test report and Photos-test-set-up
Be labeled with its own FCC ID number, and 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." The exact wording is not specified in our Rules (since modules are not specifically addressed), so you may use similar wording which expresses the same meaning.	The label with the FCC ID and the IC number is on the equipment, see label sample. The user manual includes instruction to explain how to label the end product
Module meets all the specific rules and operating requirements that ordinarily apply to a complete transmitter. All the necessary instructions are provided in the manual.	The user manual includes the necessary instructions.
Address compliance with the Commission's RF exposure limits in Sections 1.1310 and 2.1093. Unlicensed PCS devices operating under Subpart D of Part 15, UNII devices operating under Subpart E of Part 15, and millimeter wave devices operating under Sections 15.253 and 15.255 require routine environmental evaluation for RF exposure prior to equipment authorization in accordance with Sections 15.319(i), 15.407(f), 15.253(f) and 15.255(g), respectively. Therefore, routine RF evaluation is required for these transmitters. 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). If it cannot be demonstrated that a spread spectrum transmitter will meet these requirements with proper installation, operating/ warning statements or labels, routine RF evaluation must be used to demonstrate compliance	No requirements for 15.225 low power devices.

Best Regards,

Moncef AZZOUZI, engineer

Signature

Thales Transportation Systems S.A.
S.A. au capital de 21 244 095 Euros
Siège social : Centre du Bois des Bordes - BP 57 - 91220 Brétigny-sur-Orge - France
N° SIRET 389 381 377 00024 - RCS ÉVRY 389 381 377