

TWN4 MultiTech M

INTEGRATION MANUAL

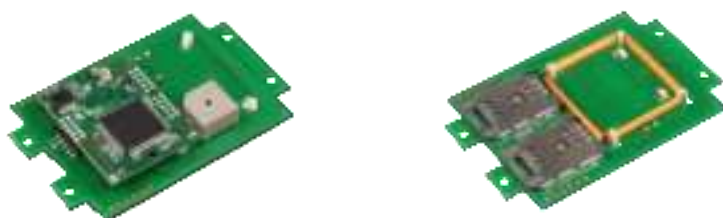


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INTRODUCTION

ABOUT THIS MANUAL

This integration manual explains how to integrate ELATEC RFID module TWN4 MultiTech M into a host device and is mainly intended for integrators and host manufacturers.

The content of this integration manual is subject to changes and printed versions might be obsolete. As the module manufacturer, ELATEC is responsible for the update, release and publication on the FCC database of this integration manual. The integrators and host manufacturers are required to use the latest integration manual published by ELATEC on the FCC database.

ELATEC, integrators and host manufacturers are liable for any failure to observe these requirements.

SAFETY NOTES

- ELATEC TWN4 MultiTech M is an electronic component and should be installed exclusively by a trained and qualified personnel.
- ELATEC recommends the integrators to follow general ESD protective measures during the installation of the TWN4 MultiTech M in a host device, e.g. the use of an antistatic wristband or special gloves.
- The integrator should not touch the antennas (if not shielded), printed circuit boards, connectors or other sensitive components on the TWN4 MultiTech M.
- Before installing the TWN4 MultiTech M in a host device, the integrator should also make sure that he/she has read and understood the technical documentation of the host manufacturer related to the host device.

TERMS AND DEFINITIONS

Term	Definition
host device	Also "host" or "host product". Device in which an RFID module is intended to be installed for operation.
integrator	Responsible party for the integration of an RFID module into a host device. The integrator might be the module manufacturer, the host manufacturer, the end user or any other third party.
modular type	Physical configuration in which a modular transmitter operates when installed within a host device. It can be a single-modular, a limited single-modular, a split-modular or a limited split-modular type.
RFID module	Device intended to be used within another device or product. Depending on the equipment configuration and intended use, an RFID module has to meet different requirements to get a modular grant.

RELEVANT DOCUMENTATION

ELATEC documentation

TWN4 MultiTech M data sheet
TWN4 MultiTech M functional description
TWN4 MultiTech M technical handbook
TWN4 MultiTech M user manual

External documentation

Document name	Document title/description	Source
n/a	Technical documentation related to the host product	Host product manufacturer
784748 D01 General labeling and Notification	General Guidelines for Labeling and Other Information Required to be Provided to Users	Federal Communications Commission Office of Engineering and Technology Laboratory Division
996369 D01 Module Equip Auth Guide	Transmitter Module Equipment Authorization Guide	Federal Communications Commission Office of Engineering and Technology Laboratory Division
996369 D02 Module Q and A	Frequently Asked Questions and	Federal Communications Commission

	Answers about Modules	Office of Engineering and Technology Laboratory Division
996369 D03 OEM Manual	Guidance for Modular Transmitter Instruction Manuals and TCB Certification Application Reviews	Federal Communications Commission Office of Engineering and Technology Laboratory Division
996369 D04 Module Integration Guide	Modular Transmitter Integration Guide— Guidance for Host Product Manufacturers	Federal Communications Commission Office of Engineering and Technology Laboratory Division

For more information about this integration manual or the TWN4 MultiTech M, go to www.elatec.com or contact ELATEC.

ABOUT TWN4 MultiTech M

ELATEC's TWN4 family of transponder readers and writers allows users to read and write to almost any 125 kHz, 134.2 kHz and 13.56 MHz tags and/or labels. It supports all major transponders from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, etc. and ISO standards like ISO14443A/B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC).

The new generation is a direct enhancement to the successful TWN3 family as it comes in the same mechanical dimensions (OEM PCB and Desktop Housing). The reader supports host communication via USB or RS-232.

Refer to product data sheet or elatec.com for technical data.

INTEGRATION IN OTHER DEVICES

TECHNICAL REQUIREMENTS

In order to start operating a TWN4 MultiTech M transponder reader, it simply has to be connected to a host. Once the transponder reader is connected to the host, it detects the type of communications cable (USB or RS232), with which it is connected to the host.

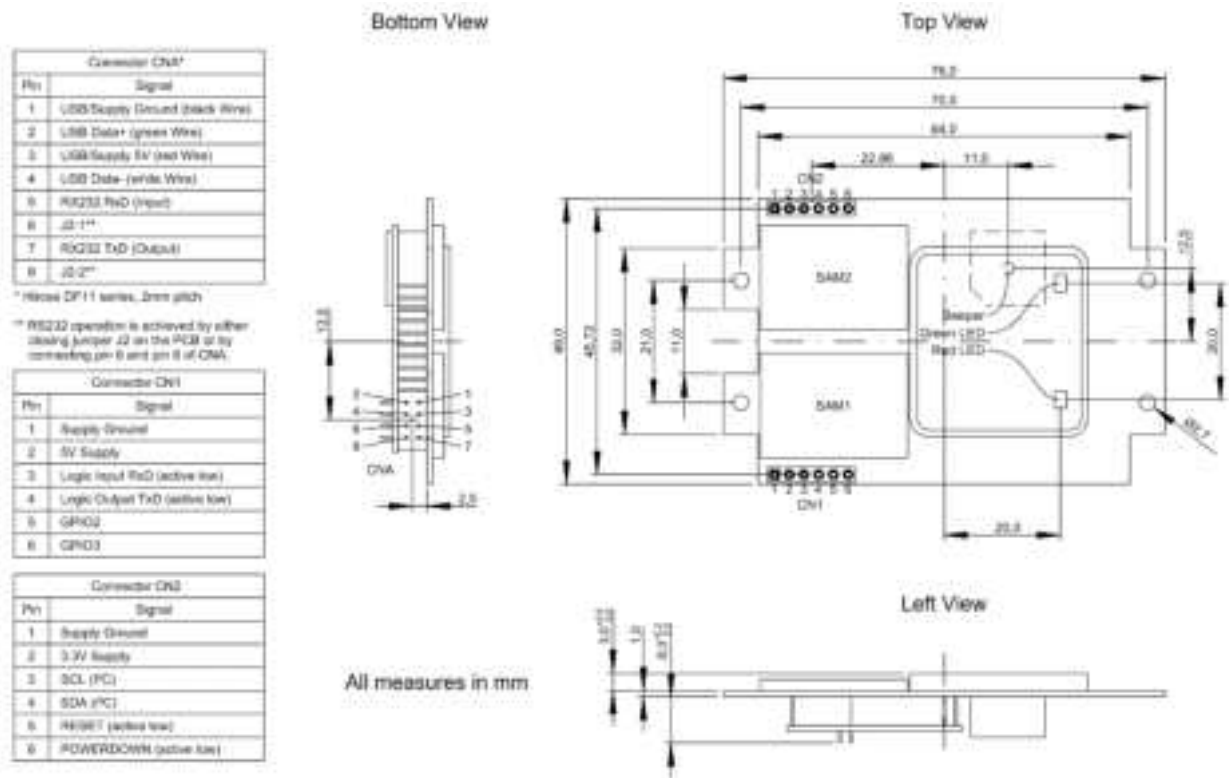


Abbildung 1: Dimensions and pinout of TWN4 MultiTech M

MECHANICAL INSTALLATION

There are 4 holes for mechanical fixation of the board, see Abbildung 1: Dimensions and pinout of TWN4 MultiTech M

ELECTRICAL CONNECTION

The module can be connected via USB, RS232 and other interfaces see Abbildung 1: Dimensions and pinout of TWN4 MultiTech M
The input voltage is 4.3V to 5.5V.

FURTHER REQUIREMENTS

-Label requirements

Using a permanently affixed label, the TWN4 MultiTech M must be labeled with an own FCC identification number. In case this label is not visible anymore after integration of the TWN4 MultiTech M in the host device, it is necessary to bring a label on the host device (on a visible and accessible place) stating the FCC identification number of the integrated TWN4 MultiTech M.

FCC

(RF module)

Compliance statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modification of equipment:

The instruction manual of the host shall include the following statement: Changes or modifications made to this equipment not expressly approved by the party responsible for compliance may void the FCC authorization to operate this equipment.

Information to the user:

(The instruction manual of the host shall include the following statement) A compliance statement as applicable, e.g., for devices subject to part 15 of CFR 47 as specified in §15.19(a)(3), that the product complies with the rules; and the identification, by name, address and telephone number or Internet contact information, of the responsible party, as defined in §2.909. The responsible party for Supplier's Declaration of Conformity must be located within the United States.

Host devices

FCC notes for a host subject to verification or SDoC:

For a host device assembled with the certified module and subject to 47 CFR Part 15 verification of class A digital devices, the following statements have to be included in the user manual and the host device has to be labelled as noted below. If the host device is subject to other authorization procedures or parts the appropriate requirements of these authorization procedures or parts apply.

Important note:

OEM integrator is still responsible for the FCC compliance requirements of the end product, which integrates this module. Appropriate measurements (e.g. 15B compliance) and if applicable additional equipment authorization of the host device to be addressed by the integrator/ manufacturer

The end device must be labeled with:

Contains FCC ID: WP5TWN4F17

Contains IC: 7948A-TWN4F17

HVIN: EL20208



ELATEC

RFID Systems

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