

DT50RF (5127)

Integration Manual

Company Confidential

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Table of Contents

1 Labeling	4
1.1 The electronic label is accessible	4
2 Module installation instructions	5
2.1 General note	5
2.2 Installation	5
3 Regulatory Compliance	6
3.1 Applicable rules	6
3.2 FCC Part 15, Class B	6
3.3 Industry Canada	6
3.4 RF Exposure	6
3.5 Professional Installation	7
3.6 Antennas	7
3.7 Module Co-location	7
3.8 Host product testing	7

1 Labeling

The end product has an electronic label including the following text:

- FCC ID 2AEJD-103902-1-DT50
- IC 9301A-1039021DT50
- Model DT50RF_MK2_1
- Region Domain Settings
- Grantee information
- Technical Contact

1.1 The electronic label is accessible

Devices based on factory configuration do show the e-label using a state of the art web browser:

- <http://192.168.1.20>
- <https://192.168.1.20>

The e-label is showed on the start page of the web GUI.

Rmodem



Authorization Required

Username

webadmin

Password

Login

Electronic Label



Contains FCC ID	2AEJD-103902-1-DT50
Contains ISED ID	9301A-1039021DT50
Grantee Contact	info@neratec.com
Regulatory Version	6.6.0
Region Code	U
Country Code	USA

2 Module installation instructions

2.1 General note

The module cannot be tested without a baseboard. Therefore, we have a limited modular approval. The module shall be used always in combination with a Neratec DT50 baseboard.

2.2 Installation

DT50RF_MK2_1 module has the dimensions according to Figure 1. Module thickness is 5 mm and with RF connectors 7 mm. The DT50RF_MK2_1 need to be fixed to the end product with four M2.5 screws.

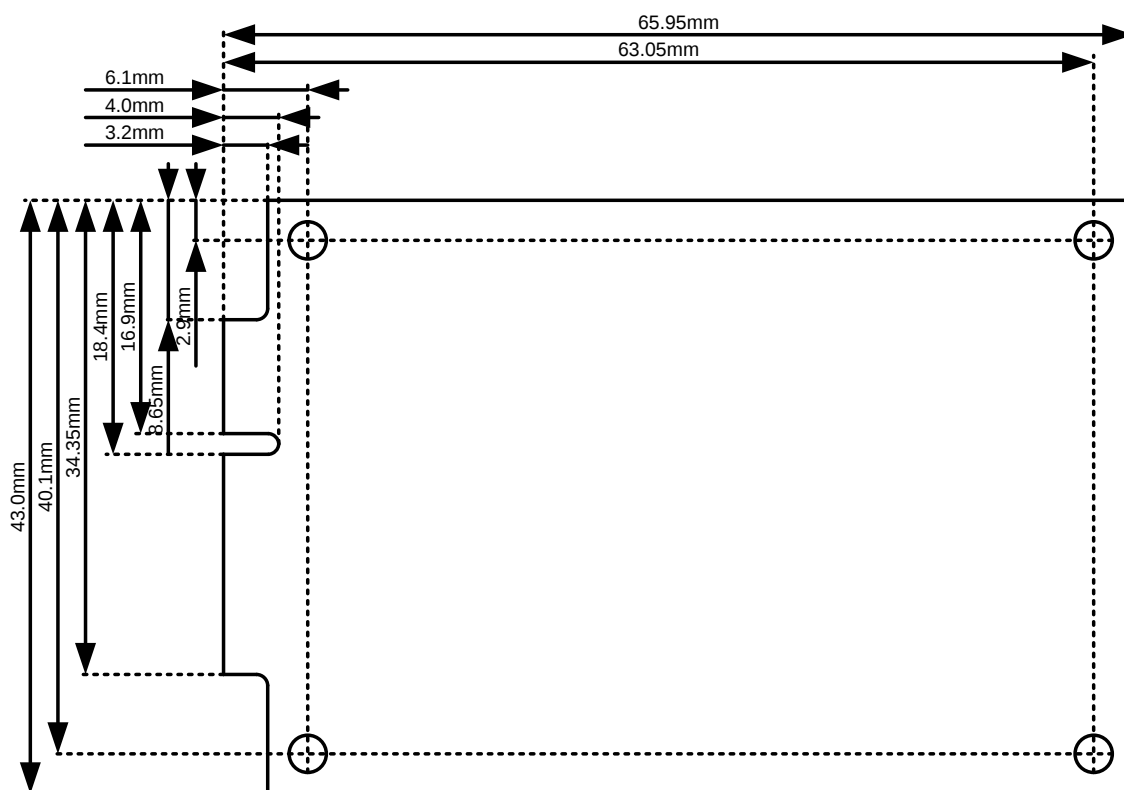


Figure 1 Dimensions of DT50RF_MK2 module

The module is connected by a PCIe interface and three MMCX antenna connectors. Following operation conditions need to be complied when the module is implemented into an end product.

Parameter	Value
Operation temperature	-40 ... +85°C
3.3V supply voltage	2.97 ... 3.63V
Current consumption	2500mA peak; 2000mA average

3 Regulatory Compliance

3.1 Applicable rules

For the module following FCC and ISSED rules are applicable.

- FCC – Title 47 CFR
 - o 15.107
 - o 15.109
 - o 15.205
 - o 15.207
 - o 15.209
 - o 15.407
- RSS – 247 Issue 2
- RSS – Gen Issue 5

3.2 FCC Part 15, Class B

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

- This device may not cause harmful interference and
- This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning: Any changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

3.3 Industry Canada

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

3.4 RF Exposure

Antennas must have a greater distance than 20cm separation from transmitting antenna to the user body during normal operation conditions.

3.5 Professional Installation

This module is intended for professional installation.

3.6 Antennas

Regulatory Approval Conditions for using the module:

This device can be used with the following antennas

Type	Part number	Manufacturer	Gain	Chains
Dipole	F51-N	Tekfun	5GHz: 7.5dBi max	1, 2, 3
Patch	SPA-5600/40/14/0/V_2	Huber & Suhner	5GHz: 14dBi max	1, 2
Patch	SPA-5600/65/9/0/MIMO	Huber & Suhner	5GHz: 9dBi max	1, 2, 3
Shark	SPA-5600/45/12/10/V	Huber & Suhner	5GHz: 12dBi max	1, 2
Patch	SPA-5600/40/14/0/V_2 with filter	Huber & Suhner	5GHz: 14dBi max	1, 2

3.7 Module Co-location

The antenna used with this module must not be co-located or transmit simultaneously with any other antenna or transmitter, except in accordance with FCC multi transmitter product procedures. Co-location with one additional DT50RF module is allowed.

3.8 Host product testing

Host products shall be tested according to FCC – Title 47 CFR Part 15 Subpart B.

To set module into test modes the Atheros Radio Test Tool shall be used. As the module shall be used only in products developed and produced by Neratec, no instruction will be documented here. For more information contact Michael Aeschbacher.