

**RFID Module
Model number: RI23A
User Manual**

1. Introduction

GENERAL

The RI23A is a highly integrated transceiver module for contactless reader/writer communication at 13.56 MHz.

Integration to the end product

1. RI23A module is mounted in the Accessory FZ-VNF402.
2. Insert Antenna unit into Antenna connectors of RI23A module.

Technical Specification

- | | |
|-----------------------------|---|
| a) Dimensions (H x W x D): | 17.6mm x 40.15mm x 1.0mm |
| b) Supported RF protocols : | ISO/ IEC14443 Type A, Type B, Felica
ISO/ IEC15693 |
| c) Operating Temperature: | -10 to 50 degree Celsius |
| d) Host interface: | Serial Peripheral Interface |

2. Integration instruction

2.1 General

This user manual describes the integration procedure per Sec 2.2 to 2.12 of KDB 996369 D03. This is Limited modular approval as this module is limited to installation by the grantee into the grantee's host systems. The module is not intended for sale to the general public.

2.2 List of applicable FCC rules

This device complies with below part 15 of the FCC Rules.
Part 15 Subpart C.

2.3 Summarize the specific operational use conditions

This module is exclusively for use in the host device FZ-VNF402.
FZ-VNF402 incorporates this module (RI23A) and an antenna.
Incorporating this module into other host devices than FZ-VNF402 will require a separate reassessment through a class II permissive change or new certification.

2.4 Limited module procedures

This module is certified as limited modular approval under the conditions integrated within the host product FZ-VNF402.

2.5 Trace antenna designs

Not applicable.

2.6 RF exposure considerations

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines/RSS-102 of the ISED radio frequency (RF) Exposure rules as this equipment has very low levels of RF energy.

2.7 Antennas

The following antennas have been certified for use with this module; antennas of the same type may also be used with this module.

Antenna Type	Loop antenna
Antenna connector	Connector for FPC/FFC

2.8 Label and compliance information

Following information must be indicated on the host device of the module.

Contains FCC ID:ACJ9TGRI23A

Contains IC: 216H-CFRI23A

2.9 Information on test modes and additional testing requirements

This transmitter is tested in a standalone mobile RF exposure condition and any co-located or simultaneous transmission with other transmitter(s) or portable use will require a separate class II permissive change re-evaluation or new certification.

2.10 Additional testing, Part 15 Subpart B disclaimer

This transmitter module is tested as a subsystem and its certification does not cover the FCC Part 15 Subpart B (unintentional radiator) rule requirement applicable to the final host. The final host will still need to be reassessed for compliance to this portion of rule requirements if applicable.

As long as all conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

2.11 Additional testing, Part 15 Subpart B disclaimer

We recommend to use "best practice" RF design engineering testing and evaluation in case non-linear interactions generate additional non-compliant limits due to module placement to host components or properties by following KDB 996369 D04 Module Integration Guide.

The host manufacturer is responsible for ensuring compliance with the applicable FCC rules for the transmitters operating individually and simultaneously. This includes compliance for the summation of all emissions from all outputs occupying the same or overlapping frequency ranges, as defined by the applicable rules.

2.12 How to make changes

Only the grantee is permitted to make permissive changes.

Please contact us at Panasonic.

2.13 Miscellaneous

The compliance statements required in Sections 15.19 and 15.105 must be included in the host user manual.