

IEEE802.11a/b/g Wireless LAN MiniPCI Module

# **FX-DS540-MPCI6**

User's Manual (Installation Manual)

CONTEC CO., LTD.

# Chapter 1: General Description

This document contains the specifications pertinent to the wireless LAN module (FX-DS540-MPCI6), which comply with IEEE802.11a, IEEE802.11b and IEEE802.11g.

FX-DS540-MPCI6 is used attaching in the wireless LAN access point.

## Features

### 2.4GHz Wireless LAN module

- IEEE802.11b and IEEE802.11g compatible
- BPSK, QPSK, CCK, and DSSS modulation schemes supported Data rates 1, 2, 5.5 and 11Mbps
- BPSK, QPSK, 16QAM, 64QAM and OFDM modulation shemes supported Data rate 6, 9, 12, 18, 24, 36, 48 and 54Mbps
- Coax. RF connectors : HIROSE U.FL equivalent

### 5GHz Wireless LAN module

- IEEE802.11a compatible
- BPSK, QPSK, 16QAM, 64QAM and OFDM modulation shemes supported Data rate 6, 9, 12, 18, 24, 36, 48 and 54Mbps
- Coax. RF Connectors : HIROSE U.FL equivalent

### System Functions

- Low power sleep mode control
- MiniPCI Interface
- Radio circuit ON/OFF (RF Disable)

## Chapter 2: Characteristics

**Table1 : Mechanical Characteristics**

Dimensions	31.3 x 59.6 x 2.4 (mm)
Weight	10g

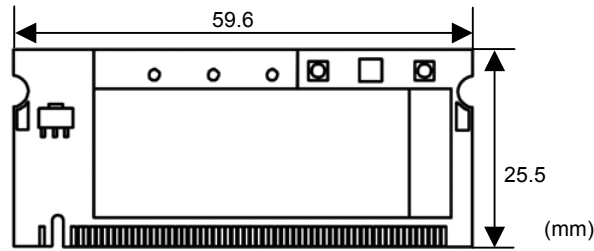


Figure1 : FX-DS540-MPC16

**Table2 : Electrical Characteristics**

Supply voltage Vcc	Nomial : 3.3V Extreme : 3.3V +/- 10%
Storage temperature	-20 to 80 deg.C
Humidity	10 to 90%(no-condensing)
Operating Temperature	0 to 70 deg.C
Humidity	10 to 90%(no-condensing)
Regulatory Domain	0x3A
Supported Channel *1	IEEE802.11b/g : 1-11ch (2412-2462MHz) IEEE802.11a : 36-48ch (5180-5240MHz) 52-64ch (5280-5320MHz) *2 149-165ch (5745-5825MHz)

\*1 : A user cannot change a supported channel.

\*2 : In 52-64ch, AdHoc communication is not possible.

## Chapter 3: Setup

FX-DS540-MPC16 is used attaching in the wireless LAN access point. The wireless LAN access point is restricted only to CONTEC products.

As an example, the case where it attaches in FX-DS540-STB-NR52-U is introduced.

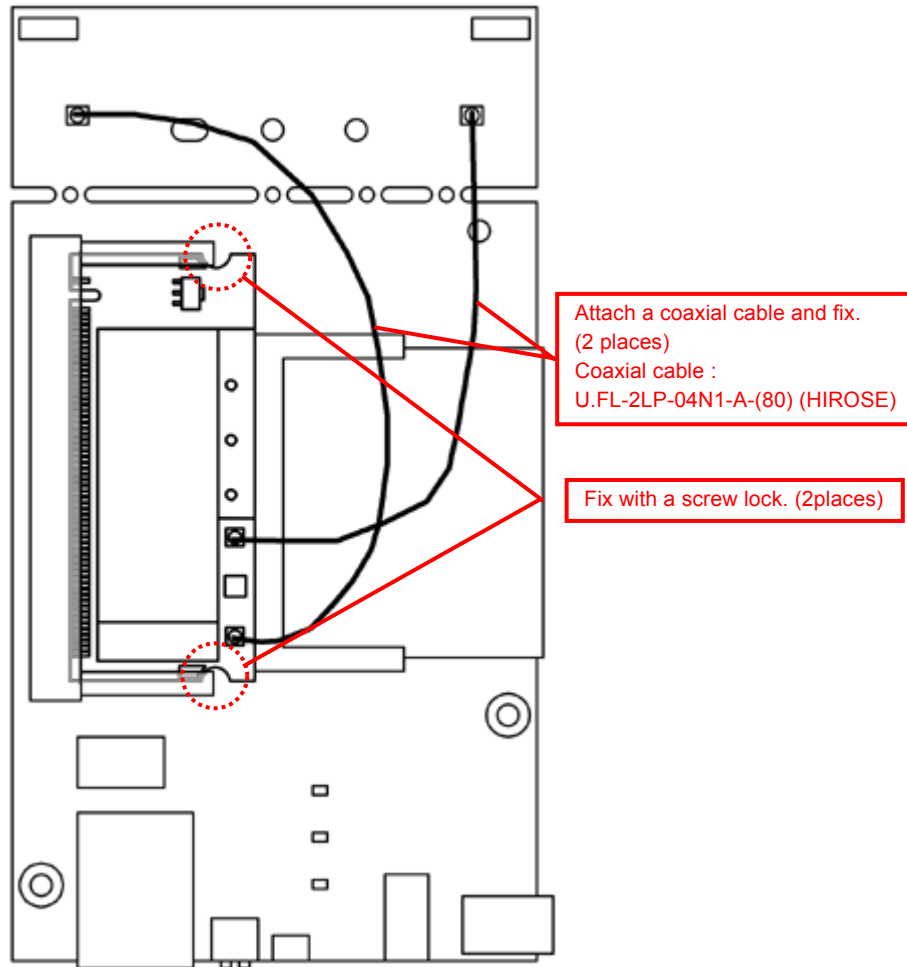


Figure2 : How to attach in FX-DS540-STB-NR52-U

## Chapter 4: Notes

When FX-DS540-MPCI6 is installed in the wireless LAN access point, the following remarks are to be considered:

1. FX-DS540-MPCI6 is designated its own FCC ID Number: PQRDS540-MPCI6; therefore, the FCC ID Number should be appeared on the label on the exterior of the wireless LAN access point unless it is visible from outside. Such label on the exterior should include a statement, either “Contains Wireless LAN Module FCC ID: PQRDS540-MPCI6” or “Contains FCC ID: PQRDS540-MPCI6”.
2. FX-DS540-MPCI6 is in compliance with the requirements of sub-sections 15.203, 15.205, 15.207, 15.209, 15.247 and 15.407 of FCC Rules Part 15. FX-DS540-MPCI6 is to be installed in accordance with their requirements.
3. User Manual of the wireless LAN access point, in which is FX-DS540-MPCI6 installed, will include the following statements required by FCC.
  - FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment
  - 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.
  - In according with 47 CFR Part15.407 (e) U-NII devices operating in 5.15-5.25GHz frequency bands are restricted to indoor operations only.
  - This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
  - This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment should be installed and operated with at least 20cm and more between the radiator and person’s body (excluding extremities: hands, wrists, feet and legs).
4. The installers must ensure that the public is not exposed to radio frequency energy levels in excess of FCC guidelines in accordance with FCC Rules: Part 15 and FCC OET Bulletin 65, Supplement C.