



"Value & Technology"

KOYO ELECTRONICS INDUSTRIES CO., LTD.

FCC Modular Integration Instructions

KOYO ELECTRONICS INDUSTRIES CO. LTD., FCC ID: 2AVNJ-0001 is seeking modular approval. The radio meets the requirements for modular approval as detailed in (reference FCC 15.212 and FCC KDB 996369) and (Specification: FCC 15.247).

2.2 List of applicable FCC rules

"C2-CPU RADIO BOARD" is tested to below:

47 CFR § FCC 15.247 - Operation within the bands, 2412–2484 MHz

Type of Radio: 802.11bgn SISO radio with 2 antenna type(s) and 1 antenna port(s)

Exposure Condition: Used FURTHER than 20 cm from the head and torso and extremities

Certification: Full (Single) modular approval (reference FCC 15.212 and FCC KDB 996369)

2.3 Summarize the specific operational use conditions

Below antennas are to be used with "C2-CPU RADIO BOARD"

Antenna Info	Antenna1	Antenna2
Manufacturer	TAOGLAS	TAOGLAS
Specification File Name	GW.26.0151.pdf	G30.B.108111.pdf *1
Model number(Manufacturer)	GW.26.0151	G30.B.308151.ha
Model number(AutomationDirect.com)	SE-ANT210	SE-ANT250
Gain (dBi)	Less than 1.8dBi	Less than 1.5dBi
Description(e.g. dipole, yagi, patch, etc.)	Monopole (Direct Mount)	Monopole (Panel Mount)
Radiation	Omni-directional	Omni-directional
Cable	N/A	3m(9.8ft)
Connector type.	RP-SMA	RP-SMA

*1:There is two change from "G30.B.108111" to "G30.B.308151.ha"

Change1:"G30.B.308151.ha" is "G30.B.108111" of connector changed from SMA to RP-SMA.

Change2:"G30.B.308151.ha" of cable length is 3m(9.8ft) "G30.B.108111" is 1m(3.3ft)

Specifications are the same except for connectors

2.4 Limited module procedures

Not applicable. "C2-CPU RADIO BOARD" is certified as Single Modular Approval.

2.5 Trace antenna designs

Not applicable. "C2-CPU RADIO BOARD" uses external antennas please refer to section 2.3.

2.6 RF exposure considerations

"C2-CPU RADIO BOARD" is used as the CPU board of the programmable logic controller.

Customers use it basically as follows:

When used in a steel control panel, use Monopole (Panel Mount) of SE-ANT250.

Otherwise, use Monopole (Direct Mount) of SE-ANT210.

2.7 Antennas

"C2-CPU RADIO BOARD" uses external antennas please refer to section 2.3.

2.8 Label and compliance information

1) The label C2-02CPU RADIO BOARD of the circuit board



2) The label C2-03CPU RADIO BOARD of the circuit board



3) Host Products(CLICK PLUS CPU) containing C2-CPU RADIO BOARD



Please see the Cover Letters for FCC application exhibit for compliance information.



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2.9 Information on test modes and additional testing requirements

1)Bluetooth

Host(CLICK PLUS CPU) into the pairing mode(provisioning mode) following method.

(1)Factory default condition

(2)Press and hold the pairing button for 3 seconds during Host(CLICK PLUS CPU) is in STOP Mode.

The pairing button is located at the end of the hole and cannot be pressed with a finger.

2)Wireless LAN

Use the following method to set the Wireless LAN SSID and password.

(1)Koyo provide iOS and Android application.

The application support provisioning that the application connect to Host(CLICK PLUS CPU) via Bluetooth and setting SSID and password.

(2)CLICK PLUS programming software(Windows application) has setting parameter of SSID and password and It will transfer to CLICK PLUS CPU via physical connection like USB.

3)How to reset to factory default

CLICK PLUS programming software(Windows application) can be reset to factory default via physical connection like USB

2.10 Additional testing, Part 15 Subpart B disclaimer

KOYO ELECTRONICS INDUSTRIES CO. LTD., FCC ID: 2AVNJ-0001 is manufactured as the programmable logic controller using "C2-CPU RADIO BOARD".

"C2-CPU RADIO BOARD" is not sold separately, so additional testing is not required.