# QI-150P Modular User Manual (NA)

Model Name: QI-150P

Ver. 1.0 2018.07.12

Hitachi Information & Telecomunication Engineering, Ltd.

# Revision history

Revision	Date	Description	
Ver. 1.0	July 12, 2018	Initial release	

# 1. Introduction

This document describes notes on using wireless communication module (model name: QI-150P) in North America.

Country list:

USA

#### 2. Features

- WiGig and IEEE 802.11ad-2012 standard compliant
- Supported Frequency Range : 57~64GHz
- Supported Channel: 1~3 (subject to regional regulatory restrictions)
- Supported Data Rate: MCSO, MCS1 (385Mbps) ~ MCS12 (4.6Gbps)
- Supported Modulation:  $\pi/2$ -BPSK,  $\pi/2$ -QPSK,  $\pi/2$ -16QAM
- IEEE 802. 11a/b/g/n/ac dual band 2x2 MIMO
- BT4.1 + HS, BLE, and ANT+.
- WiGig supports PCIe Gen2 (supports L1 sub-state) host interface
- WLAN supports PCIe Gen1 (supports L1 sub-state) host interface
- BT supports USB1.1 host interface
- Low and various power consumption, according to the usage model
- M. 2 2230-S3-A-E form factor: 22 x 30mm
- WiGig/802.11ad connector on module: Murata MM5829-2700
- WLAN/BT connector on module : Murata MM4829-2702
- Debug Interface : JTAG
- Support the following potential applications
- Instant wireless sync
- Wireless display
- Cordless computing (i.e. wireless docking)
- Internet access.
- RoHS compliant

# 3. FCC compliance information

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.

#### FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/ TV technician for help. (Section 15.21)

## CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

(FCC 2.1091 and FCC 2.1093) RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This radio transmitter FCCID: 2AOV3QI-150P has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	STAF	T17-002-1054	Dipole Antenna	3 dBi for 2.4 & 5 GHz

Note: The antenna connector is Reverse SMA type.