

Clarification Information for the use of N-Connectors in Bluefin 2G (2.4GHz Wi-Fi) radios; R2408262

From: Hitachi Energy Inc. , 2535 Augustine Dr, Santa Clara, CA 95054, USA

To: Bay Area Compliance Laboratories, Corp. 1274 Anvilwood Avenue, Sunnyvale, CA 94089, USA

Regarding FCC guidelines not allowing for a general (broad) use of the N-connectors in radio products.

Below is the explanation for the use of this connector type in the Hitachi Energy Bluefin 2G Wifi radios:

- Hitachi Energy's wireless routers (the products where the Bluefin 2G module/radio are integrated) are not available in the mass market, or as a consumer product.
- The wireless products (devices) are available for enterprises, such as power grid operators, utility companies, etc. and can be only purchased by such.
- The primary field of operation are power grids and industrial automation systems, where they serve the function of wireless communication devices. These products are installed next to/along the power grids critical infrastructure.
- Therefore:
 - These products are to be used by professional users only.
 - Professional installation is mandatory for these devices and this requirement is clearly stated in installation guides, hardware reference guides, product labeling (on the product itself) and other user facing documentation.
 - Installation guidelines list the permitted antenna types and corresponding characteristics, and the use of the antennas that do not meet these is not allowed.
- Our devices are not sold to the retail market (general mass consumer market) and cannot be obtained via typical, easy to use consumer channels (like via a webstore, using an email, etc). We sell these products only to the named customers, that – based on our due diligence - can meet the professional installation requirements. We sell these products primarily through direct channels, or verified (authorized) partners.
- The devices are designed to be installed in restricted areas (distribution power grid poles, substations, along the utility lines, etc.). These areas are always out of reach to the general public, typically with additional security measures (access control, 24/7 monitoring, physical access prevention measures). Due to the nature of the applications and use cases served, and the nature of the operations of the customers – professional technicians and installers are mandatory, for both initial deployments of the devices, maintenance operations, replacements and in-field issue recovery.

We therefore declare that our products using Bluefin 2G Wifi radios meet the requirements to be classified (according to FCC rules) as professional installation. On that basis we look for an approval for the use of N-connectors.

Signed for and on behalf of:

Date: 10th March 2025

Name and title: Tomasz Wojtowicz, Product Manager Signature: 