



Date: 18Sep15

**Subject: Application for Certification of I4U-25VST-AMP**

**To whom it may concern:**

This letter responds to questions posed in conjunction with our filing for certification of I4U-25VST-AMP, in accordance with Part-90. These questions are dated 14Sep15, and respond to JOB #: 1804UC15.

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- 1) The NDA has been modified to explicitly include photographic images of this product as confidential, and not to be disclosed. Please see the supplied NDA file.
- 2) This device is not a portable, hand-carried, or body-worn application, and shall be used only in a mobile environment. Calculations of Maximum Permissible Exposure (MPE) limitations show that this device complies with "Uncontrolled Exposure" limits when a distance of 26.6cm is maintained from a 2.5dBi antenna. "Controlled Exposure" limits are met at a separation distance of 11.9cm. These calculations assume that this device is the only transmitter present. Therefore, this device shall be subject to the following usage limitations:
  - a. This device is intended for occupational or professional use only.
  - b. To comply with MPE regulations, this device shall be connected to an antenna with a maximum gain of 2.5dBi. Users shall be cautioned to verify that the antenna connected does not exceed the specified maximum gain prior to commencing transmitter operation.
  - c. Users shall be made aware that the transmitter produces Radio Frequency (RF) energy, and shall be trained in the maintenance of a safe separation distance from an active radiating element.
  - d. Users shall maintain a minimum separation distance of 20cm from the radiating antenna when it is actively transmitting, to comply with Controlled Environment MPE limits.
  - e. A minimum installation distance of 20cm shall be maintained to other antennas present in the application.
- 3) The following language will be added to the user manual.
  - a. When this device is integrated into a user configuration, care shall be taken to maintain Radio Frequency (RF) shielding integrity. All RF paths shall employ coaxial cable and high-quality RF connectors. Integration drawings and photographs shall be provided to IMT for review upon request. IMT retains responsibility for the function of this device as designed and



- granted. Device integrators assume responsibility for ensuring that the installed environment is equivalent to the reference design environment, and for maintaining RF performance integrity as related to integration and installation.
- b. Upon completion of integration, and prior to commencing transmitter operation, an RF output power measurement shall be made to ensure that the output power does not exceed 5W.
  - c. The following Maximum Permissible Exposure (MPE) limitations assume a single transmitter, with a maximum antenna gain of 2.5dBi, using vertical polarization. Controlled Exposure MPE limitations are met at a distance of 12cm from the radiating element, and a 20cm separation is recommended. Users shall be instructed to maintain this clearance when the transmitter is active. Uncontrolled Exposure limitations are met at a separation distance of 27cm. Device integrators are responsible for MPE compliance of the installed environment.
- 4) This device shall be installed and maintained to provide a maximum of 5W of transmitter RF output power. Production tolerances and allowable adjustment ranges shall permit a +0dB and -6dB variation about this point.
  - 5) Form 731
    - a. The Emission Designators should be: 1M25W7D, 2M50W7D, 6M00W7D, 7M00W7D, and 8M00W7D.
    - b. Consistent with KDB634817, page 4, Item III, only the widest bandwidth needs to be listed.
  - 6) We provide a schematic for the transmitter, FCC-ID: I4U-25VST. This document is considered included under the confidentiality request. IMT does not have a schematic for the RF power amplifier; it is sourced from a supplier as a component, with a Specification Control Document (SCD). The provided SCD is considered IMT Confidential, and included under the confidentiality request.
  - 7) A Bill-of-Materials (BoM) is supplied for the transmitter, again considered a confidential submission. IMT does not have a BoM for the RF power amplifier.
  - 8) This device is intended for use only by professional/occupational users. The transmitter does not have user accessible external controls, in compliance with 90.203(g). Frequency programming tools are only provided to service/maintenance personnel.
  - 9) I have reviewed the assembly drawing provided, and do not find the FCC Part-15 statements shown on the label.
  - 10) The two Part-15 statements have been deleted from the user manual.

Sincerely,

A handwritten signature in black ink that reads "Stephen D. Kitko". The signature is written in a cursive, flowing style.

Stephen D. Kitko  
FCC Contact Person, Compliance Engineer  
Integrated Microwave Technologies LLC