



To Whom It May Concern:

The MultiConnect Conduit MTCDTIP-LAT1-275x-915 and MTCDTIP-LVW2-275x-915 are intelligent, configurable microprocessor-based wireless data gateways operating in the 915 MHz ISM band using LoRa Chirped Spread-Spectrum modulation with a bandwidth of 500 kHz and a maximum output power of 30 dBm. Each unit contains a multi-channel Software Defined Radio baseband processing subsystem with two separate, simultaneous LoRa RF transceivers. Each unit also includes IEEE 802.11, Bluetooth, and optional cellular connectivity options, as well as a GPS receiver. It is powered using Power-over-Ethernet (IEEE 802.3) over a 10/100 Mbps standard wired Ethernet interface. The units use a custom build of Linux, with an optional AEP (Application Enablement Platform) layer. The unit may be operated as a simple wireless data packet forwarding engine, or may be configured with custom software to also perform higher-level server functions.

WE, MULTI-TECH SYSTEMS INC., 2205 Woodale Dr., Mounds View Minnesota 55112 United States, are seeking Original certification for a system approval for Models MTCDTIP-LVW2 and MTCDTIP-LAT1 (FCC ID: AU792U18H30862, IC ID: 125A-0059). The approval is limited to the combination of LoRa radio, LoRa antenna, chassis, system boards, and power supply. The two models are wireless hubs that are electrically and mechanically identical.

Previously certified radio modules are factory installed in the system. One of two cellular radio modules and a WiFi/Bluetooth/Zigbee radio module are used. The only difference between the two model numbers is which cellular modem is installed. Here is a summary of the configurations of previously certified radio modules:

Model: MTCDTIP-LAT1 (tested) containing the following certified modules:

- Cellular radio module FCC ID: RI7LE910NA, IC: 5131A-LE910NA
- WiFi/Bluetooth/Zigbee FCC ID: XF6-RS9113DB, IC: 8407A-RS9113DB

Model: MTCDTIP-LVW2 (not tested) containing the following certified modules:

- Cellular radio module FCC ID: FCC ID: RI7LE910SV, IC: 5131A-LE910SV
- WiFi/Bluetooth/Zigbee FCC ID: XF6-RS9113DB, IC: 8407A-RS9113DB

Sincerely,

Tracey Dickinson
VP Program Management and
Continuous Improvement
Multi-Tech Systems, Inc