

TEKTELIC Communications Inc. 7657 10th Street NE Calgary, Alberta Canada, T2E 8X2

# KONA MEGA GATEWAY – 900MHz TDD

## Family Certification Information

DOCUMENT TYPE: FAMILY CERTIFICATION

DOCUMENT NUMBER: T0008387\_FC

DOCUMENT ISSUE: 1.0

**DOCUMENT STATUS:** APPROVED

PRODUCT NAME: KONA MEGA GATEWAY

PRODUCT CODE: See Table 1

ISSUE DATE: October 21, 2022

TEKTELIC Communications Inc. 7657 10<sup>th</sup> Street NE Calgary, AB, Canada T2E 8X2 Phone: (403) 338-6900

### **Document Revision**

Revision	Issue Date	Status	Editor	Comments
1.0	Oct. 21, 2022	Released	K. Minderhoud	Approved

#### **Contents**

1	Fa	mily Certification Information	4
1	1.1	Bulkhead Lavout	6

#### 1 Family Certification Information

The T0008387 Kona Mega Gateway family includes all the variants listed in Table 1.

The gateway variants are differentiated by the following: by the number of LoRa transceivers (1 or 2, each with its own antenna); by a 3G/4G backhaul option (all models include ethernet backhaul); and by the frequency selectivity of the internal cavity bandpass filter.

All variants include GPS with external antenna connection, a direct 48V DC power input, and a copper Ethernet port. Input power can be supplied either directly via the 48V DC port, or via Power over Ethernet (PoE).

**Table 1: KONA Mega Gateway Models** 

Product Number	1X LoRa ANT	2X LoRa ANT	LTE Modem	Passband (MHz)	Reference
T0004978	х			915-928	Figure 2
T0004982		х		915-928	Figure 4
T0004988	х			920-925	Figure 2
T0004992		х		920-925	Figure 4
T0004996	х			920-928	Figure 2
T0005000		х		920-928	Figure 4
T0005004	х			915-928	Figure 2
T0005006	х		х	915-928	Figure 3
T0005008		х		915-928	Figure 4
T0005010		х	х	915-928	Figure 5

All variants listed in Table 1 use the same internal T0007691 radio/digital PCBA. The individual LoRa transceivers in each variant are all electrically identical. The optional 3G/4G radio modem is integrated internally at the factory by installing approved commercial modules into connectors on the radio/digital PCBA. There is no post factory module configuration allowed.

Figure 1 illustrates the common Gateway external form-factor. The differences between the options are limited to the bulkhead field, and the internal cavity bandpass filters.







**Figure 1: KONA Mega Gateway Common Dimensions** 

#### 1.1 Bulkhead Layout

The KONA Mega Gateway bulkhead component fields are detailed in the following figures.

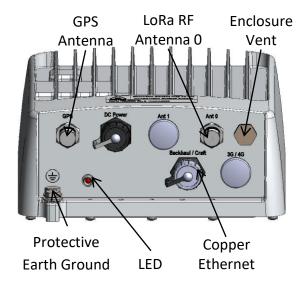


Figure 2: KONA Mega Gateway Option #1 with Circular Plastic Connector Bulkhead Field

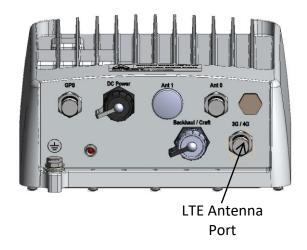


Figure 3: KONA Mega Gateway Option #2 with Circular Plastic Connector Bulkhead Field

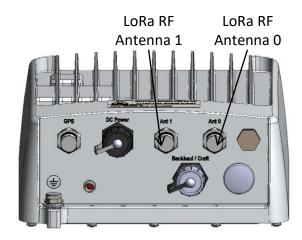


Figure 4: KONA Mega Gateway Option #3 with Circular Plastic Connector Bulkhead Field

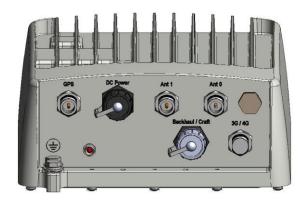


Figure 5: KONA Mega Gateway Option #4 with Circular Plastic Connector Bulkhead Field