

KST

KS Technologies, LLC

LoRa
Alliance
Member

Affinity Helium LoRaWAN Gateway KST7020

Affinity is an Enterprise-Class LoRaWAN Gateway built for Helium, The People's Network. Affinity offers a robust custom enclosure, industrial rated components, and device fleet management capabilities. Affinity is the perfect solution for collecting LoRaWAN sensor data using multiple gateways deployed in multiple locations backed by Helium's carrier-grade LoRaWAN Network Server (LNS).

To learn more about the KST Affinity and other KST products, please reach out to us at info@kstechnologies.com



Features



- LoRaWAN - US915 with fine timestamping capabilities
- Optional Support for EU868 and AU915
- Power-Over-Ethernet (PoE) and WiFi data backhauls

- USB Type-C for local on-site configuration and diagnostics
- Hardware GPS for location services and security



Device Specifications

The Affinity Gateway includes an industrial-grade Compute Module combined with a low-phase noise LoRaWAN Concentrator built by KST (our KST7030).

The Affinity Gateway includes:

- Barrel jack (Power) or Power-over-Ethernet (PoE, Power + Data)
- Embedded digital display
- WiFi
- GPS
- External Antennas

Optional Items Available Separately:

- Wall Mounting Hardware
- 2m Cat 5e Ethernet Cable
- 12V 1A(12W) DC Power Supply
- PoE Injector

The Affinity Gateway allows for:

- Enterprise-level commissioning and wallet aggregation for Affinity Fleets of Devices
- Fine Timestamping to support geolocation services for LoRaWAN Edge Devices that do not contain a hardware GPS
- Deployment of custom edge applications by Enterprise
- Remote configuration and setup via Secure Dashboard
- Firmware Over-the-Air (FOTA) Updates
- Access to remote management and Affinity health data
- Cloud-based GPS in locations where hardware GPS is unavailable
- USB-based local configuration
- Mobile app support provided by KST's own Affinity App for Android



End user may only change the antenna and extension cable under the following conditions:

1. New antenna must have equal or less gain in dBi
2. New antenna must be the same type as the antenna that shipped with the KST7020
3. New antenna and cable must be terminated with the same connector type and gender as the unit which was included with the KST7020

Contains FCC IDs: 2AA3A-KST7030 & TFB-1003
Contains ICs: 5969A-1003

Setup Guide

The Affinity Setup guide is available at <https://kstechnologies.com/affinity/affinitySetup>

KS Technologies offers engineering services to help you solve whatever remote sensing problem you might be facing. Contact us today to learn more about how we can integrate your sensor solution with the Cloud.



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