



KS Technologies



LoRa® Modem Universal RS-232 Uplink KST5421

The KST5421-US915 is a robust, DC-powered LoRa® modem purpose-built to transmit RS-232 serial data to any LoRaWAN Network Server. Designed for flexible deployment across industrial and environmental applications, it bridges legacy serial devices with modern long-range, low-power LoRaWAN® infrastructure, no cloud endpoint or mobile app required.



Housed in a weather-resistant, IP67-rated enclosure, the KST5421-US915 is engineered for outdoor or embedded use in remote installations. Its pre-flashed firmware enables rapid commissioning, and its compact, buttonless form factor ensures durability and minimal maintenance.

Whether you're integrating weather sensors, serial controllers, or other field devices, the KST5421-US915 provides a dependable and secure uplink path for device data over LoRaWAN®.

Applications

- Industrial telemetry
- Agricultural automation
- Environmental sensing
- Remote equipment monitoring
- Smart infrastructure deployments

NOTE! This product is preconfigured to work out of the box with the Aratas Weather Station. If you would like to use this product with any other device, you will need to contact us at info@kstechnologies.com



Design and Build happens in Colorado, USA





Key Features

- **RS-232 to LoRaWAN[®]**
 - Enables bidirectional RS-232 communications over LoRaWAN[®], supporting reliable uplinks and downlinks for remote data collection, uplink interval adjustments, and sensor-specific configuration.
- **LoRaWAN Certified & Server-Agnostic***
 - Compatible with LoRaWAN[®] v1.0.3 or later and works with any network server.
- **Rugged, IP67 Enclosure**
 - Fully sealed housing with no buttons, switches, or LEDs; built to withstand harsh outdoor conditions.
- **Easy Power & Communication****
 - Dual cable interface for DC power (6–24VDC) and serial data via industrial M12 connectors.
 - Fully compatible with Solar Panels + Charge Controllers + Batteries.
- **Factory-Programmed Identity**
 - Each unit includes a unique LoRa Alliance[®] LoRaWAN[®] Device Identification QR Code for Automated Onboarding.
- **No Dependencies**
 - Operates completely independently; no app, no cloud, just serial in and LoRaWAN[®] out.
- **Custom Integration**
 - Preconfigured for Aratas Weather Sensor integration. Need support for another RS-232 device? We offer custom protocol integration and dedicated product variants tailored to your application.

* You will need to provide your own LoRaWAN[®] Gateway and LoRaWAN[®] Network Server

** You will need to provide your own power supply

KST offers complete LoRaWAN[®] solutions, including gateways, network servers, power supply options, and custom RS-232 protocol integration. Contact us at info@kstechnologies.com to discuss your application.

Product Family

Part Number	Frequency Plan	Accessories
KST5421-US915	US915	
KST5421-EU868	EU868	
KST5421-PM		Pole Mount Kit
KST5421-Solar		Solar Power Kit

Contains FCC ID: YCP-32WL5MOCH01

Contains IC: 8976A-32WL5MOCH01

Specifications

- IP67 Weather Resistant
- Min. Operating Temp: -20°C
- Max. Operating Temp: 50°C
- Abs. Min. Temp: -25°C
- Abs. Max. Temp: 55°C
- Min. Operating Humidity: 5%RH
- Max. Operating Humidity: 95%RH
- Abs. Min. Humidity: 5%RH
- Abs. Max. Humidity: 95%RH
- Weight: 11oz





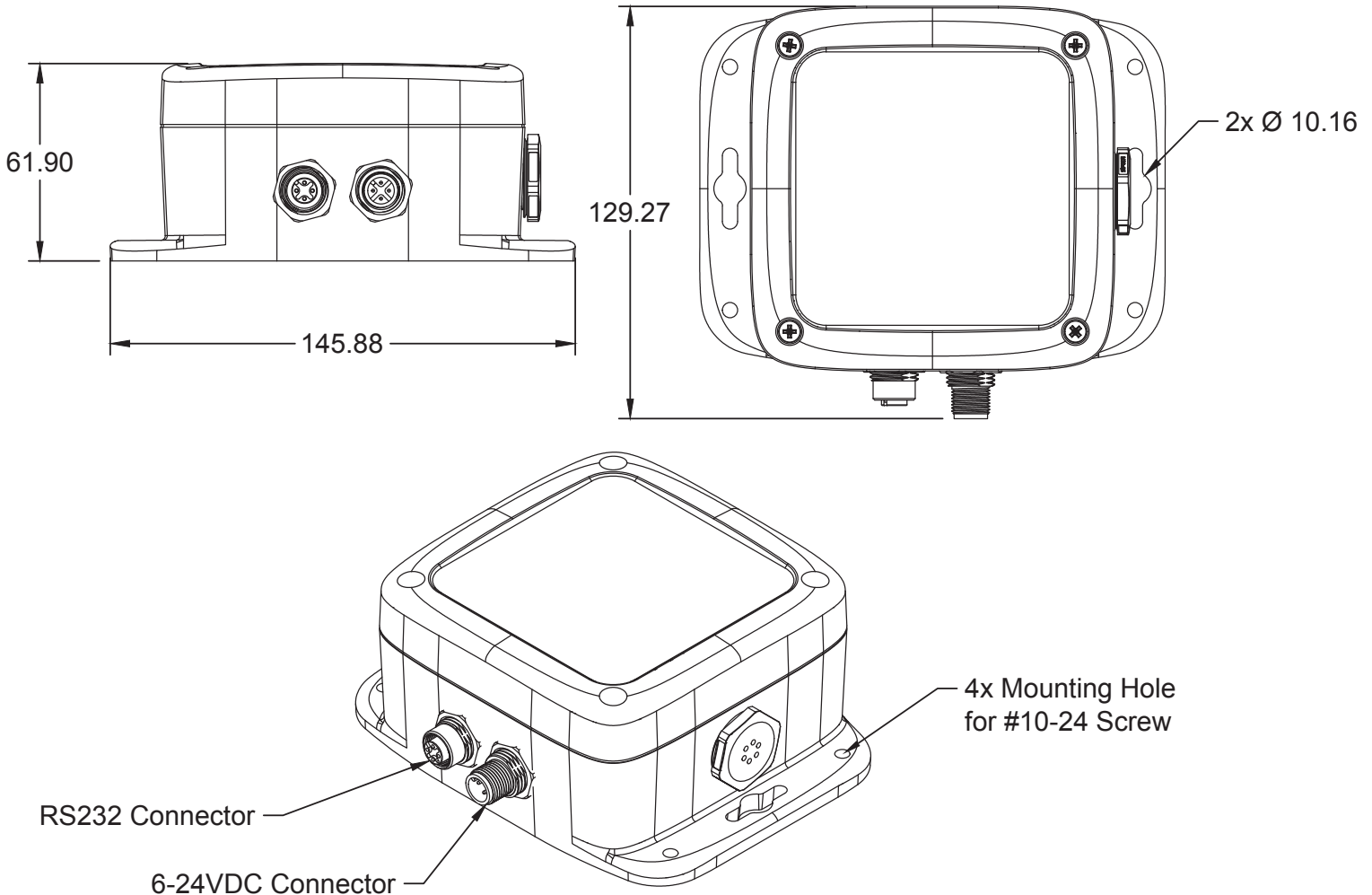
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LoRa Alliance Member

LoRa® Modem

Universal RS-232 Uplink | KST5421

Mechanical Drawing



* All Dimensions are in mm

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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