

Instruction Manual

Amplified Wireless Repeater

K200R



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K200R Amplified Repeater

1 Part Description: K200R Wireless Amplified Repeater

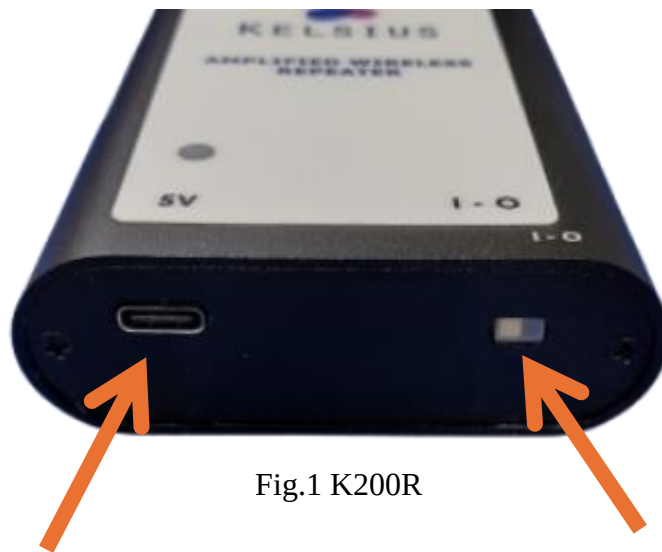


Fig.1 K200R

5V USB-C Power Supply

ON/OFF Switch

2 General Description and Purpose

The K200R is designed to extend the Kelsius RF network by receiving and transmitting RF packets. It should be directly mounted within the Kelsius WAN to enhance the RF performance of Kelsius low power battery sensors, these units might be located in basements, large warehouses or outbuildings.

Its main power source is 5V USB Type-C, the K200R also contains a rechargeable battery that will power the device in the event of mains power failure.

The K200R is activated by operation of the recessed on/off switch at the bottom of the device. (left position On, right Position Off)

This equipment design typically applies to commercial or industrial equipment expected to be installed in locations by Kelsius trained engineers and where only adults are normally present.

3 LED Indications

Green LED

The Green Led (Fig.2) will indicate the power up sequence and if an established communication link has been discovered.

On power up the device will illuminate two times. After power up it will indicate if the device is communicating with a network controller.

If the K200R is installed and communicated to a Kelsius Network Controller, the green LED will flash six times.

If the K200R is not installed on a network controller the green LED will flash once.



Fig.2 K200R Green LED

Orange LED

The orange LED (Fig.3) is used to report the battery status.

Solid orange LED will indicate the battery is charging.



Fig.3 K200R Orange LED

4 Specification

Specification	
Power Supply	5V USB-C
Radio Range (line of sight)	700m
Frequency Band	902-928 MHz FHSS
Antenna	Linx ANT-916-PW-LP ^[1]
Remote Configuration	Application settings and firmware updatable over RF ^[2]
Battery	Lithium-polymer 3.7V 1500mAh
Battery Backup Duration	50 Hours
Size	Width: 70.3mm Height: 126.1mm Depth: 24.5mm
Enclosure	Aluminum
Weight	134g

[1] [Antenna datasheet](#)

[2] The device accepts firmware updates only via the system's managed update process. Radio parameters are factory-set and not user-adjustable.

Installation Conditions	
Ambient Temperature	-30°C to +40°C
Relative Humidity	20% to 80%
Atmospheric Pressure	870hPa to 1085hPa

5. Regulatory Information

Product identification:

Model	FCC ID	IC
K200R	2BWIPK200R	35798-K200R

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED Canada Interference Statement

ISED Canada — Licence -Exempt Notice (RSS-Gen, English)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

ISED Canada — Avis d'exemption de licence (CNR-Gen, Français)

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) L'appareil ne doit pas produire de brouillage ; (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure Statement (FCC / ISED RSS-102)

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and any person.

Cet équipement est conforme aux limites d'exposition aux rayonnements de la FCC et d'ISDE établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé en maintenant une distance minimale de 20 cm entre la source de rayonnement et toute personne.