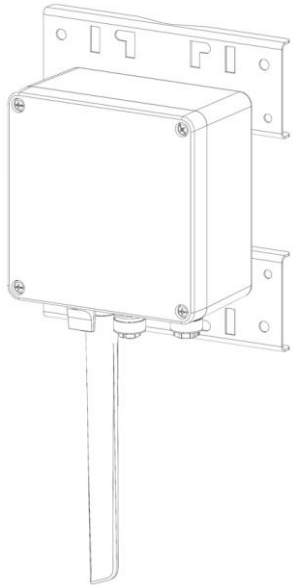
K-Mote

LoRaWAN Data Logger



KRUCIAL

K-Mote Overview

The K-Mote powers wired sensors and transmits the data received via LoRaWAN.

To use the K-Mote with a K-Cell its DevEUI and AppKey must be added via the controlling application. If using a KRUCIAL application, instructions can be found at:

Krucial CONNECT: https://connect.krucial.cloud

Krucial Connected Seafarms:
https://aquatics.krucial.cloud

Installation

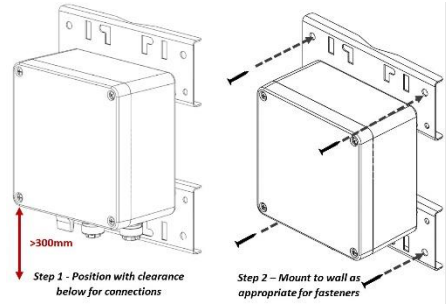
Warning: ***This equipment must only be installed by an instructed and approved installer. Contact KRUCIAL for approved installer details.***

Safety Information

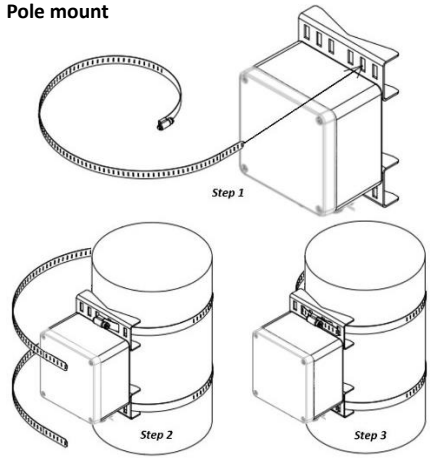
Component	Hazard	Suggested Mitigation
KMote, power cable	110-240VAC mains electricity	Device/cable not to be opened/disassembled. Isolate power lead from source before any work.
Mounting brackets, jubilee clips, wall fasteners	Metal edges could cause lacerations or irritation to hands.	When installing, tough protective gloves should be worn.

The K-Mote must be installed with connectors/interfaces facing down.

Wall mount



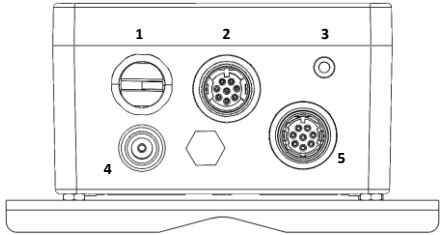
Pole mount



Connecting to an AC power supply

The equipment must only be operated with a protective earth connection. In the permanent electrical wiring to the mains socket, a 1 Amp rated energy-isolating device, for example a fuse or circuit breaker capable of providing complete disconnection, must be provided in both the live and neutral phases.

Interfaces



Interface Position	Function/Connection
1	ON/OFF switch
2	Sensor cable
3	Status LED
4	Antenna
5	Power cable

Operation

ON/OFF Switch Status

Power OFF		Power ON	

Status LED

LED Flash	Device State
Solid LED	Switch on; Self test
Single-flash, every 20s	Normal operation
Double-flash, every 20s	Battery low
Triple-flash, every 20s	Failed sensor read; failed LoRa transmission

Warranty

Warranty information can be found in your contract with Krucial.
On return of a faulty K-Mote, if it is determined to have been opened or modified, replacement costs may be charged to the installer/customer.

Support

Visit: www.krucial.com/support

Contact: support@krucial.com

Regulatory Information

FCC

Changes or modifications to the device could void the user's authority to operate the equipment.

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.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

ISED

Only antennas supplied by the manufacturer for use with this device must be used.

Contact the manufacturer to obtain Canadian information on RF exposure and compliance.

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.

This equipment should be installed and operated with a minimum distance of 20 centimetres between the radiator and your body.

This radio transmitter IC: 30625-R3800009300 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna type to be used with this transmitter:
Taoglas TD.95.6H31(G) – peak gain 1.54dBi, impedance 50Ω

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.

Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

Cet émetteur radio IC : 30625-R3800009300 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antennes répertoriés ci-dessous, avec le gain maximal autorisé indiqué. Les types d'antenne non inclus dans cette liste qui ont un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil

Type d'antenne utilisée avec ce transmetteur:
Taoglas TD.95.6H31(G) – gain de crête 1.54dBi, impédance 50Ω