

# Quad CellLink

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User Guide

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**HAIVISION**

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## Copyright and Trademarks

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## Compliance

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Before using the unit, please inform yourself about laws and regulations in force in the country in which you use it.

Please refer to the sticker pasted on the unit to know its version.

The declaration of conformity is available upon request. Should you need it, please contact Haivision.

# Safety and Health Precautions

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## Handling the Unit

- To avoid any injury during the installation, observe local health and safety requirements and guidelines for manual material handling.
- The unit must be handled carefully and thoughtfully to prevent safety hazards and damage.
- Due to the presence of strong magnets:
  - be careful of pinch hazards due to the attractive force of the magnets to any object containing iron
  - keep the device as far as possible from any object containing iron during transport
  - do not face magnets together for storage of multiple devices

## Electronic and Radio Interference

- To avoid interferences with electronic devices contained in vehicles, keep the unit away from the vehicle's dashboard.
- When connected to wireless networks (3G/4G), the unit emits microwaves that can interfere with other electronic devices.
- The operation of this equipment in a residential environment could cause radio interference.

## Safety Precautions

- Do not use the unit in any place where the use of mobile phones is usually banned: airplanes, hospitals, and areas with potentially explosive atmosphere (e.g. gas stations, repair shops, fuel or chemical storage areas).
- Before use, check that the device is properly mounted in accordance with the mounting instructions in Mounting Instructions.
- Regularly inspect the magnetic pads for damage. If one of the pads is damaged, replace it prior to driving.
- Be aware of the total height of your vehicle since low clearance branches, bridges and parking garages can collide with the antenna.
- The handling characteristics of light vehicles (in particular crosswind sensitivity, handling on bends and braking) may change when the device is fitted.
- Modify your driving habits when the device is fastened to the vehicle: reduce your speed, especially on bends, and consider longer braking distances.
- Remove the device from the vehicle when it is not used anymore in order to reduce fuel consumption.
- Remove the device before entering automatic car washes.
- Do not use the device for any other purpose than those for which it is designed.
- Do not use the device to fasten load on the vehicle roof.

## Health Precautions

Operating the unit is not recommended for:

- People with electronic implants (e.g. pacemakers, insulin pumps, implanted pulse generators, hearing aids).
- Pregnant women, old people, children, teenagers and people suffering from epilepsy.
- If you use a medical device, please contact your physician and the device manufacturer to determine a safe distance from the magnet.

## **Servicing the Unit**

- Only trained and approved service engineers are permitted to service this unit.
- Unauthorized maintenance or the use of non-approved replacements may affect the unit specifications and invalidate any warranties.

## **Presence of Strong Magnets**

Due to the presence of strong magnets on the bottom of the device, follow the below guidelines:

- Check that the material of the mounting surface (like the car roof top) has magnetic properties.
- Only place the magnetic pads of the antenna on a magnetic surface.
- Do not interpose any object of any type between the magnetic pads and the roof of the car.
- When the device is placed on a steel sunroof, keep the sunroof in the closed position and do not operate it.
- Do not use the device on vehicles whose roofs have been repaired by means of tin, plaster layers or through varnishing of same.
- Be aware that following accidental damage (e.g. fall down of the device), the magnetic properties of the device could be affected.

# Product Presentation

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## Overview

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The Quad CellLink is lightweight external transmission solution embedding 3G/4G-LTE modems and patented high efficiency wideband antennas.

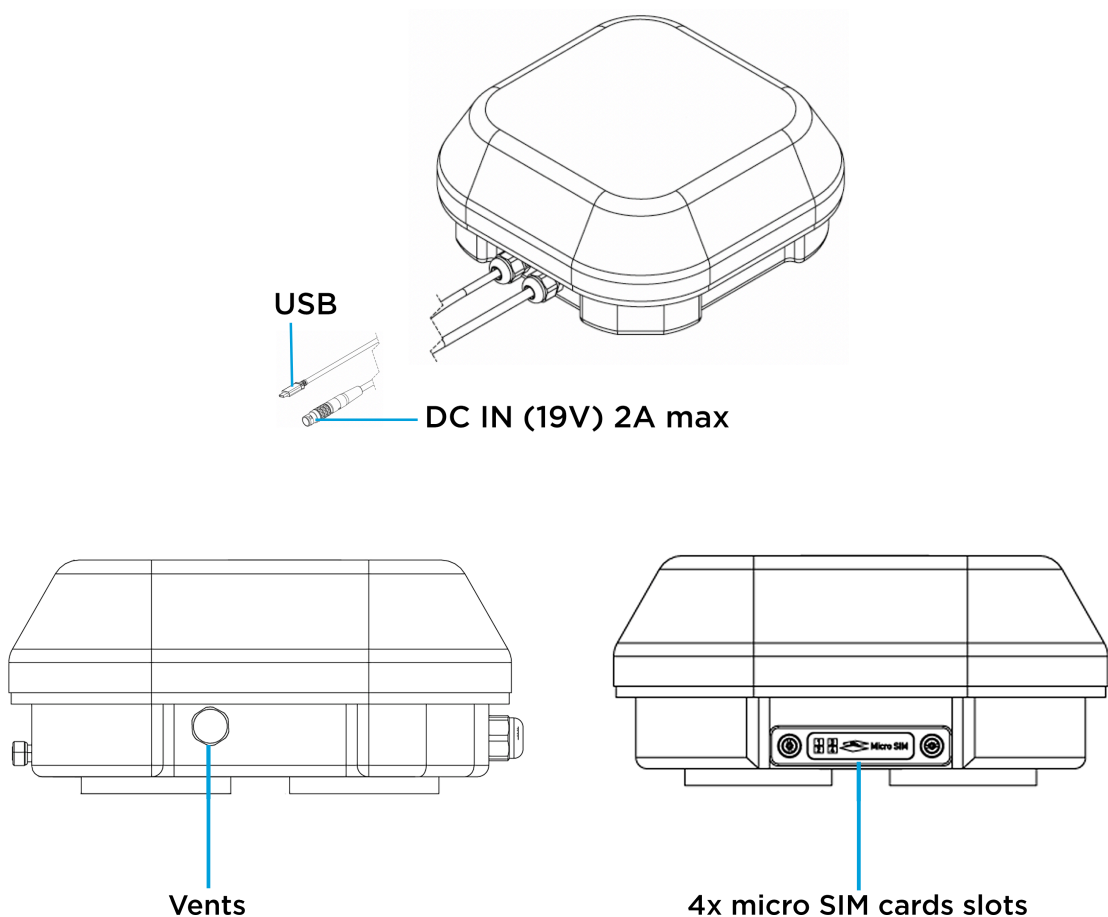
When combined with Haivision's Pro3 professional-grade backpack, Air Series compact transmitters or Rack Series encoder, the solution adds four 3G/4G-LTE network connectivity and brings additional resiliency in hostile and constrained environments.

The Quad CellLink can connect to the Haivision transmitters and encoders using USB interface. The installation is plug and play, enabling fast setup.

Its rugged and anti-UV design makes it suitable for outdoor or indoor applications. By means of its permanent magnetic pads and threaded mount, the Quad CellLink can be easily mounted on vehicles roof (cars, trucks or motorbikes) or on a tripod.

## Unit Description

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# Unpacking

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Please check that the package contains:

- Quad CellLink unit
- 19V AC/DC adapter



# Mounting Instructions



**Caution:**

Never use straps to secure the unit.

Place the unit as far a possible from metallic objects that could bock radio waves.

## Using the Magnetic Pads

To mount the unit on a rooftop using its magnetic pads, follow the steps below:

1. Thoroughly clean and dry the mounting surface to remove dust, water, condensation or viscous liquid such as oil.
2. Make sure that the magnetic pads are clean, dry and undamaged.
3. Place the antenna horizontally on the dry and clean surface.



**Caution:**

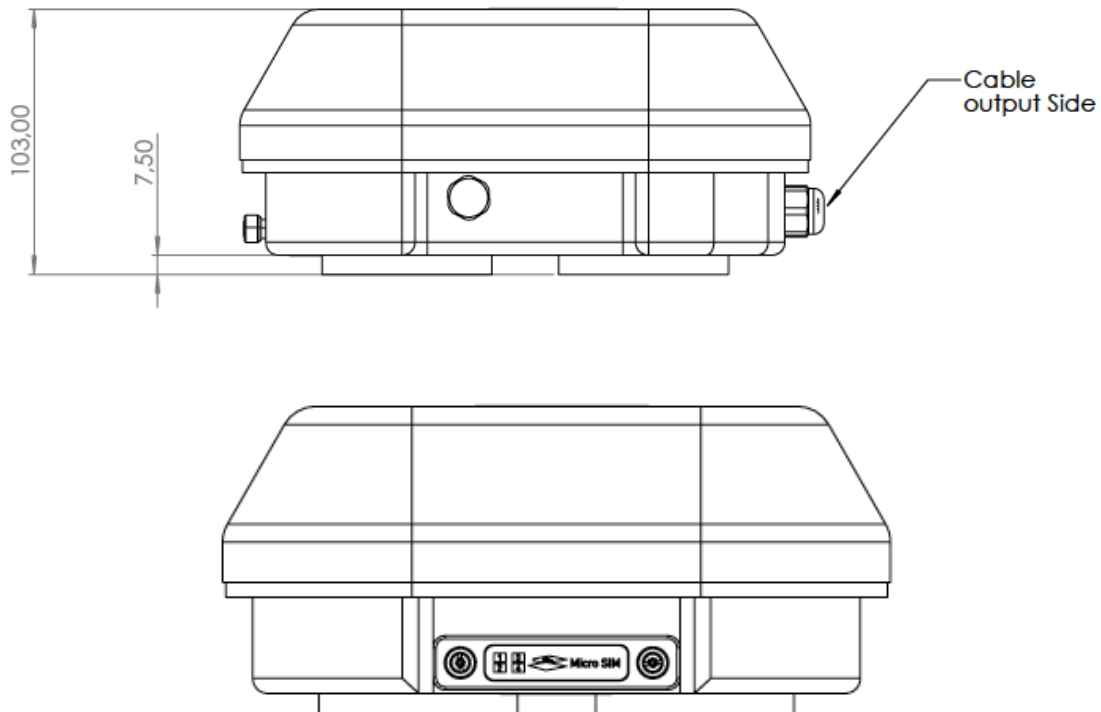
Prior to moving the vehicle, make sure to remove the unit from the rooftop.

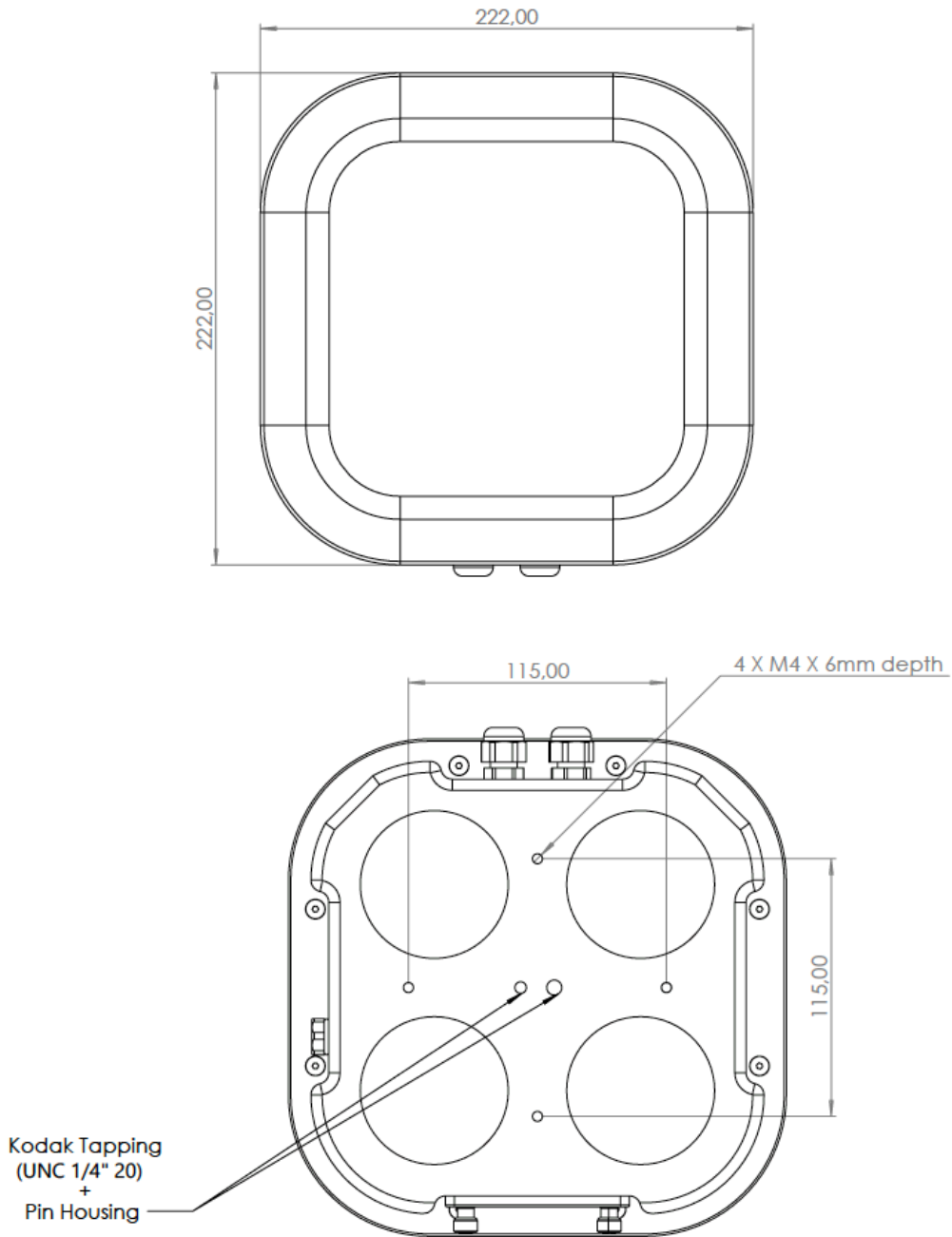
## Using the Kodak Tapping

To mount the unit on a standard tripod, a mast or a magic arm, screw a 1/4-20 threaded post into the anti-rotation 1/4-20 threaded mount.

## Using the four M4 Internal Threads

To mount the unit on a plate or a chassis, see mechanical specifications below:





### Multiple QuadCellLink

You can place several Quad CellLink on a vehicle roof.

To avoid RF coupling:

- Place units at least 20 cm (8") away from each other (border to border).
- Do not stack the units.

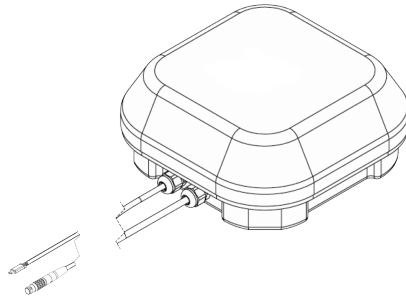
# Connecting a Quad CellLink to the Transmitter

1. On the Quad CellLink, remove the SIM card cover and insert the SIM cards into slots according to indications written on the cover.

**Note:**  
Make sure the SIM cards are already unlocked.

2. Replace the SIM card cover.
3. Connect the AC/DC adapter and the power cable.
4. Connect the USB cable to the unit.

**Note:**  
Choose a weather protected area for this connection in order to avoid any damage due to ambient humidity or rain.



5. Open the transmitter Web Interface.

**Note:**  
Please refer to transmitter or encoder User Guide.

The Quad CellLink is automatically detected:

- QUAD1-1 means modem #1 from Quad CellLink #1
- QUAD1-2 means modem #2 from Quad CellLink #1
- ...

4G <sup>B7</sup> QUAD2-1	Signal strength icon	SFR	0 bps	Antenna icon	ON	>
4G <sup>B1</sup> QUAD2-2	Signal strength icon	Orange F	0 bps	Antenna icon	ON	>
QUAD2-3	Signal strength icon	SIM missing	0 bps	Antenna icon	ON	>
QUAD2-4	Signal strength icon	SIM missing	0 bps	Antenna icon	ON	>

## Maintenance

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Carefully clean and maintain the Quad CellLink and its cable, especially in winter.

For cleaning, only use water with a mild additive-free car detergent. Cleaning the cabinet with a detergent that contains additives such as alcohol, chlorine or ammonia could damage the surface of the device and pads.

Protect the device from exposure to the elements during prolonged periods of storage.

# Specifications

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## Networks

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3G/4G-LTE	4 embedded 3G/4G-LTE modems 4 embedded high gain custom antennas 4G/LTE Bands : 1, 2, 3, 4, 5, 7, 8, 12, 13, 17, 20, 25, 26, 28, 29, 30, 38, 40 and 66* 3G/UMTS Bands: 1, 2, 4, 5 and 8
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(\*) Depending on the date of manufacture, band 66 may not be disabled by the user.

## Interfaces

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USB	Type: USB male Type A with 3 meters cable Version: USB 2.0
DC Input	Type: Standard self-latching 2-pole connector with alignment key (3 meters cable) Voltage input: 19 VDC Max current: 2A Only DC adapter provided by Haivision shall be used <ul style="list-style-type: none"><li>• Manufacturer: ENG Electric Company</li><li>• Model: 6A-601DB19</li><li>• Capacity: 19.0V / 3.42A</li></ul>

## Radiated Output Power

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UMTS	<b>Frequency Range</b> From 1920 MHz to 1980 MHz From 880 MHz to 915 MHz	<b>Maximal radiated power</b> 242 mW 133 mW
LTE	<b>Frequency Range</b> From 1920 MHz to 1980 MHz From 1710 MHz to 1785 MHz From 2500 MHz to 2570 MHz From 832 MHz to 862 MHz From 703 MHz to 748 MHz	<b>Maximal radiated power</b> 191 mW 198 mW

## Device disposal

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Dispose of this product in a separate waste collection facility according to the requirements in force in your country. Please check the regulation in force in your country. In the European Union, please refer to the WEEE Directive.

## Contact Us

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<b>General Support</b>	North America (Toll-Free) <b>1 (877) 224-5445</b> International <b>1 (514) 334-5445</b> <i>and choose from the following:</i> Sales - 1, Cloud Services - 3, Support - 4
<b>Managed Services</b>	U.S. and International 1 (512) 220-3463
<b>Fax</b>	1 (514) 334-0088
<b>Support Portal</b>	<a href="https://support.haivision.com">https://support.haivision.com</a>
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