Cohda Wireless MK6 RSU Quick Start User Guide 5.4

MK6RSU Quick Start User Guide

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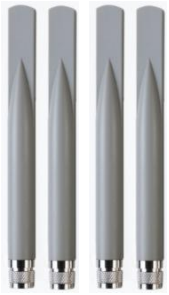
1 Kit Contents

Unpack the MK6 RSU Kit

Following items are included in the MK6 RSU Kit shipment.



RSU Unit



4x 5.9GHz Antennas
2 for DSRC, 2 for C-V2X
1*



2x LTE Antennas



2x Bluetooth/WLAN Antenna



GNSS Antenna



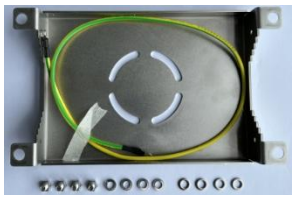
Self-Fusing Rubber Tape



Tamper evident label (Spare)



M12 Connector



Pole Mount Bracket, Earth wire, bolts, flat & spring washers



3x Stainless Steel Straps

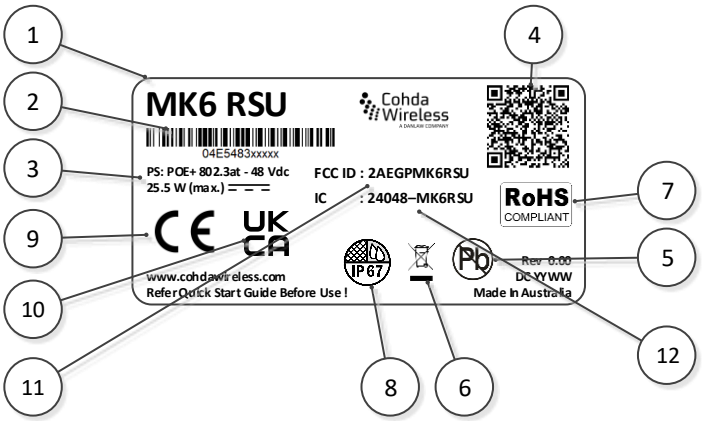


POE M12 to RJ45 Cable – 3m

Image 1.1 — Kit content

2 Product Identification

MK6 RSU Product Label (Enclosure) – Label information.



1. Product Model No.
2. Product Sr. No. Bar code information
3. Power supply Rating
4. Product Ordering Code QR Code info
5. Product is manufactured using Lead Free Materials
6. Product Disposal Symbol
7. Product is ROHS complaint
8. Product is IP 67 rated
9. CE Mark Symbol
10. UKCA Mark Symbol
11. FCC ID
12. IC ID

Image 2.1 — Product Identification label

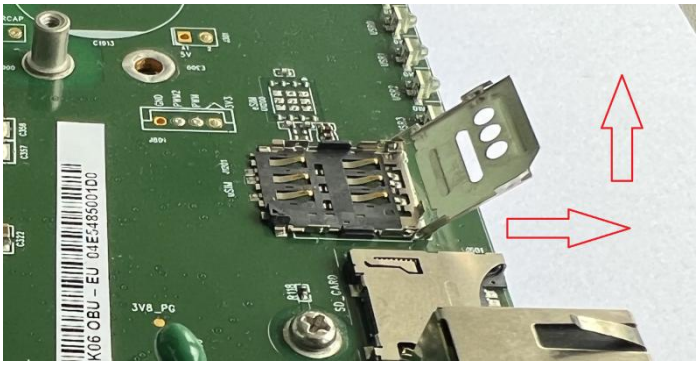
3 SIM card installation

Unscrew 4x Socket head cap screws with size 5 Allan key. Lift enclosure lid carefully.

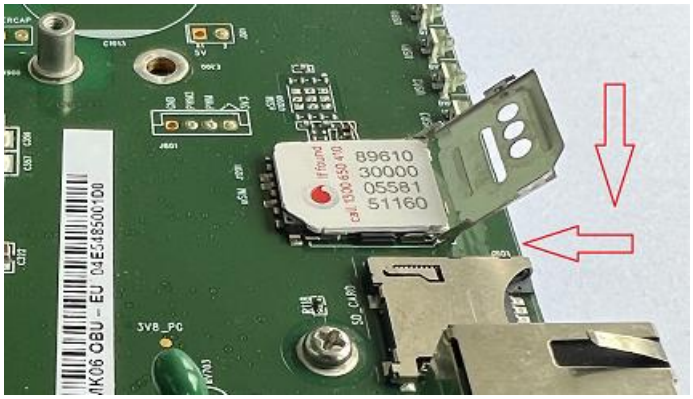


ATTENTION

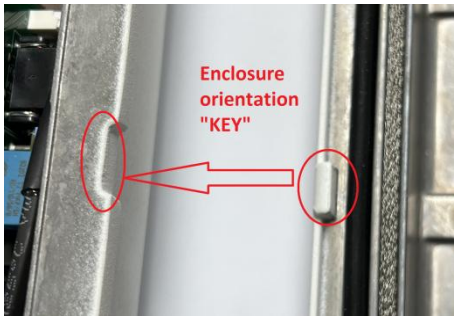
Slide SIM socket cover toward right and slip it up.



Insert micro SIM card onto socket. Slip socket cover down and slide it toward left.



Close the top enclosure. Ensure the enclosure orientation ‘KEY” is matched.



Fasten 4x Socket head cap screws with size 5 Allan-key. Following steps and torques MUST be followed to ensure enclosure is sealed properly.

Fasten screw at location 1, 2, 3 and 4 with torque 10kgf.cm
Fasten screw at location 1, 2, 3 and 4 with torque 20kgf.cm
Fasten screw at location 1, 2, 3 and 4 with torque 30kgf.cm



4 Tamper Evident proof Labe

There will be few spare Tamper Evident labels supplied with MK6RSU kit. To get Temper Proof evidence by visual inspection of the unit, please paste one or two of the Label at location indicated in below picture. Please place all surface of label firmly for label to stick properly on MK6RSU enclosure. This Golden label will indicate void if some one opens the enclosure without permission.



Image 4.1 — Tamper evident label location

5 Connecting MK6 RSU

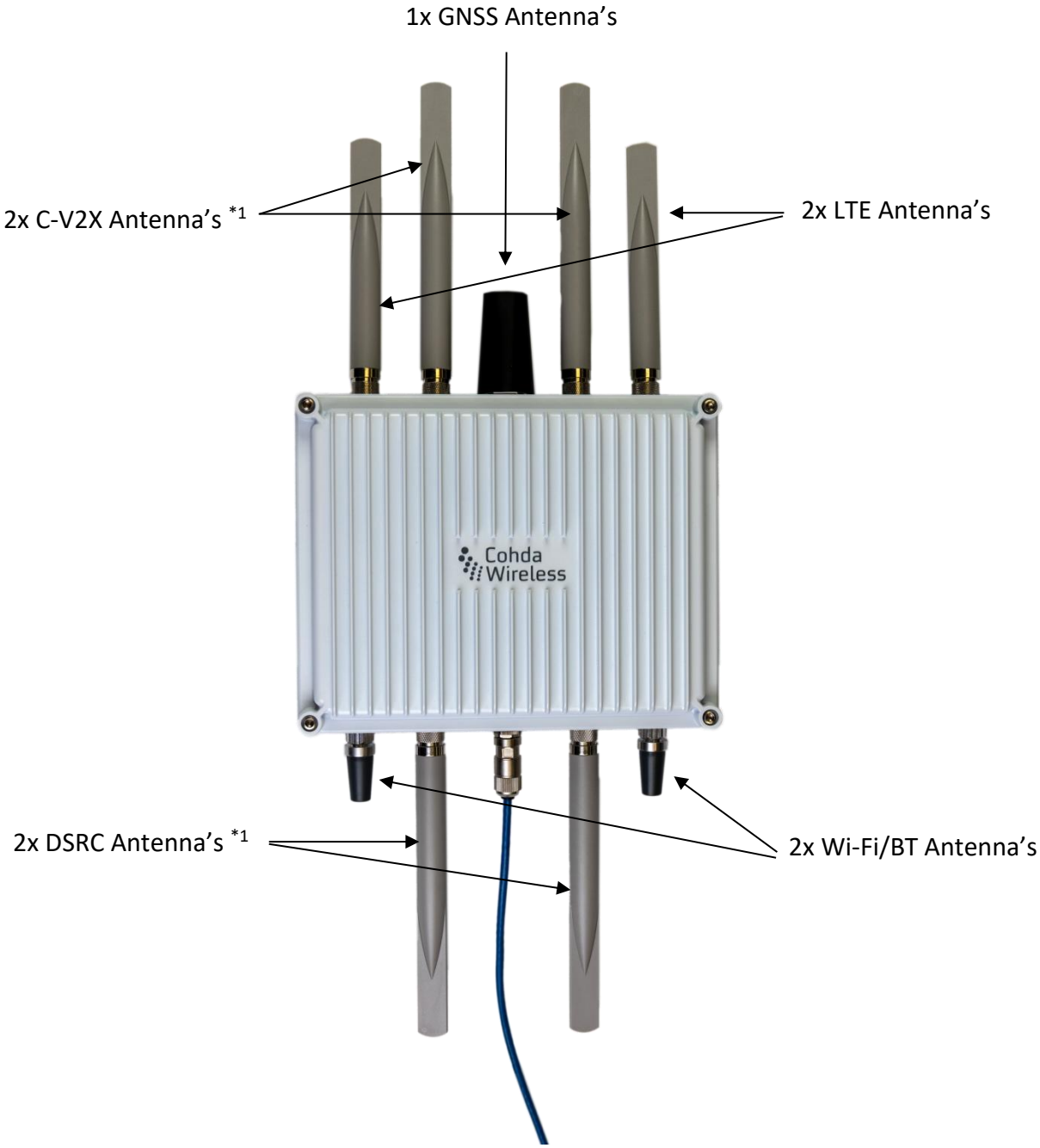
Assemble Ethernet connector using M12 X-Coded field attachable Ethernet connector. The MK6 RSU can only be powered through the Ethernet port, it supports either Mode A (Endspan) or Mode B (Midspan). The Field-Attachable Ethernet connector suits 7.7-9.0mm diameter cable by default. Please use the correct alternative grommet supplied for smaller (5.5-6.7mm or 6-7.7mm) diameter cable.

Please do not connect Power to MK6RSU or POE Connector Cable while, assembling POE cable or connecting POE Cable to MK6RSU. Supply Power to MK6RSU only once you connect Assembled M12 POE connector properly to POE connector on MK6RSU.

Please refer to the instruction sheet that comes with M12 connector or instruction on https://support.cohdawireless.com when assembling the M12 Ethernet field attachable connector!



Connect DSRC, C-V2X, LTE, Bluetooth/WLAN and GNSS antennas and M12 Ethernet connector.

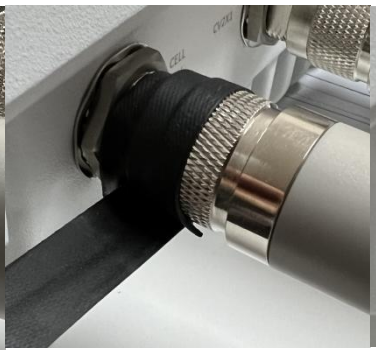


Note :
*1 – For C-V2X and DSRC MK6 RSU for Canada should be used with 50 Ohm attenuator. As this function is disabled internally By Software.

Wrap the N-connector and antenna joints with provided Self-Fusing Rubber Tape to prevent water intrusion.
-Cut a small length (10cm) of Self-Fusing tape.
-Remove backing film.
-Begin wrapping Self-Fusing tape around the N-connector and antenna joint. Stretch tape to 300% and wrap it spirally around the object with a 50% overlap.
-Repeat steps and ensure at least one complete wrap is applied.
-Cut off any excess.



Ensure the surface is clean

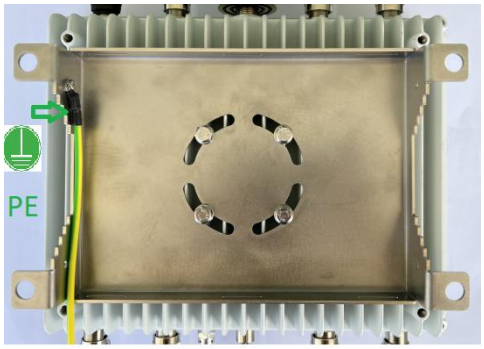


Stretch tape and wrap

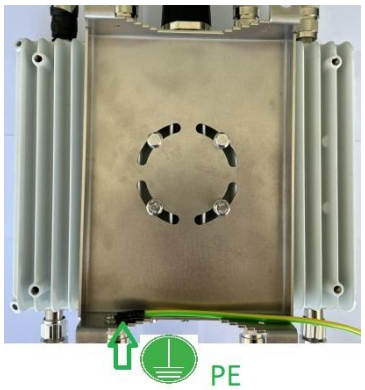


Done

Both vertical and horizontal mounting with bracket are supported.



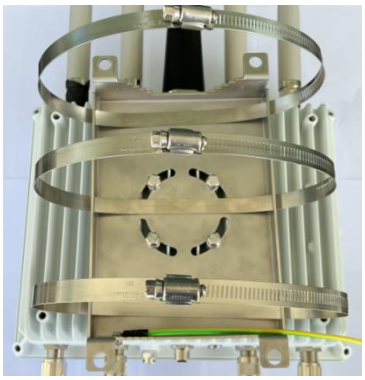
Horizontal Mount



Vertical Mount

ATTENTION

Bracket can be mounted to a Pole using the provided Stainless Steel straps, or can be bolted to a wall through four mounting holes in the bracket. The ground wire is recommended to be connected to a good common earth point.



Example of using Stainless Steel Straps.



RSU attached to Vertical pole.

6 RF bands

All Details related to Cellular Bands (4G, 5G and WCDMA), Wi-Fi Bands, Blue Tooth, C-V2X and DSRC bands are available at https://support.cohdawireless.com on relevant pages.

7 Link to Documents and Software Support

Please register at Cohda Wireless Support Website
It can be accessed in two ways:

- Directly via https://support.cohdawireless.com
- Through clicking on the "Support" tab on the Cohda Wireless website www.cohdawireless.com

On the signup page that opens, enter your name and email address in order to register for Support and access to technical documentation.
Your email address **has to be the Company email address** and not your personal email address.
Please submit a support request by clicking on the button "Submit a request" to ensure your account is validated.

Once your account has been validated and you have logged into the Customer Support website, you will have access to the information on all Cohda products, how to develop applications and FAQs.
If you have purchased the SDK license, this will be made available to you via the Cohda Wireless Support website upon account validation.

Once your account has been validated and you have logged into the Customer Support website, you will have access to the information on all Cohda products, how to develop applications and FAQs.

8 Charge Code for RSU on Un-Metered Connection

Power on highways and roads in the UK is on an Un-Metered Supplies (UMS) connection. To know how much power an equipment consumes and how much to bill for the unit, it needs a Charge Code.

You can access UMS charge code for MK6 RSU at Charge Codes and Switch Regimes page of the Elexon website.
Navigate to
Unmetered Supplies Operational Charge Codes – excel file
Down load Excel file, and locate - '**Cohda Wireless**' under 'Company' column
OR
'**MK6RSU**' under 'Manufacturer's Designation' column
You will see, 'MK6RSU' Charge code under - 'Charge Code' column as shown below

Nominal Watts	Unit Description	Company	Manufacturer's Designation	Charge Code	Circuit Watts	Date Issued	Equipment Type
17	Outstation Monitoring Unit (OMU)	**Cohda Wireless**	**MK6RSU**	**7910017001100**	17	16/04/2025	Traffic Equipment

9 Warnings, Symbols and Marking

9.1 Warning



Improper handling may lead to serious injury or even death.

9.2 Caution



Be sure to follow the instructions.

9.3 Attention



Improper handling may lead to injury or property damage.

9.4 Protective Earth



Product must be connected to proper protective Earth.

To ensure the system benefits from optimum electromagnetic interference immunity, the individual system components, and the connection cables in particular, need to be shielded. The shield must be connected to the ground reference plane.

In systems without equipotential bonding or with potential differences between the individual grounding points or multiple instances of shield grounding, can result in transient currents at system frequency. These may affect performance of the device.

9.5 Product Disposal



Products that are marked with the above symbol may not be disposed of as unsorted municipal waste (domestic waste). They should be disposed of through separate collection of electronic devices. This product and its packaging are manufactured from materials that can be recycled by specialist recycling companies. The product must be supplied to a specialist recycling company. Do not use municipal waste collection points. These may be used for privately used products only in accordance with WEEE Directive 2012/19/EU.

CE 

The MK6 RSU complies to Radio Equipment Directive 2014/53/EU. A copy of the Declaration of conformity is available on request.

FCC Compliance Statement

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 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 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.

FCC Caution: 

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Radiation Exposure Statement Caution: 

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

WARNING: 

Modifications not approved by manufacturer could void compliance.

Others

The MK6 RSU is RoHS and Lead-Free compliant. It complies with the "Directive 2011/65/EU of the European Parliament and the Council on the Restriction of Use of certain Hazardous Substances in Electrical and Electronic Equipment" (RoHS).



These instructions are for use by qualified skilled personnel only. Only professional Skilled person should Install, Start-up and Service this device as

1. Only approved antenna shown under Section 1 and section 4.2 can be used with this device.
2. It is to be installed and mounted on Traffic Poll or other device on height.
3. It takes power from Power Over Ethernet devices and to be connected with complex networks.
4. It requires to install and pack device properly to maintain it IP rating.

This device is not sold via retail or mail for normal public use.

Industry Canada statement

1. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
a) This device may not cause interference, and
b) This device must accept any interference, including interference that may cause undesired operation of the device.
1. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
a) l'appareil ne doit pas produire de brouillage, et
b) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

2. This Class B digital apparatus complies with Canadian ICES-003.
2. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

3. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.
3. Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

4. The County Code Selection feature is disabled for products marketed in the US/ Canada.
4. La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

Caution :

1) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
3) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
4) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

1) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
2) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz
et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;
3) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
4) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz
et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.
Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

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