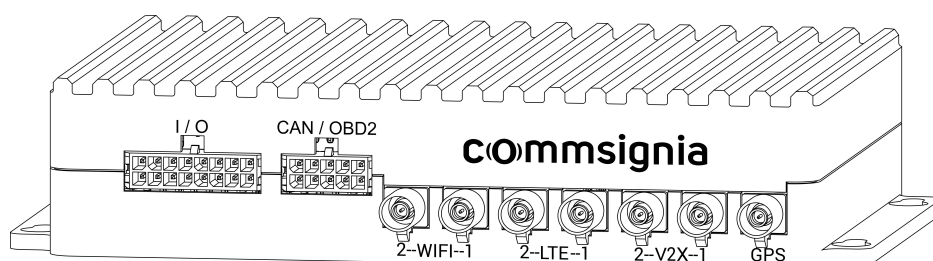


Onboard Unit (OBU)

Quick Start Guide

ITS-OB4-M

V5.0



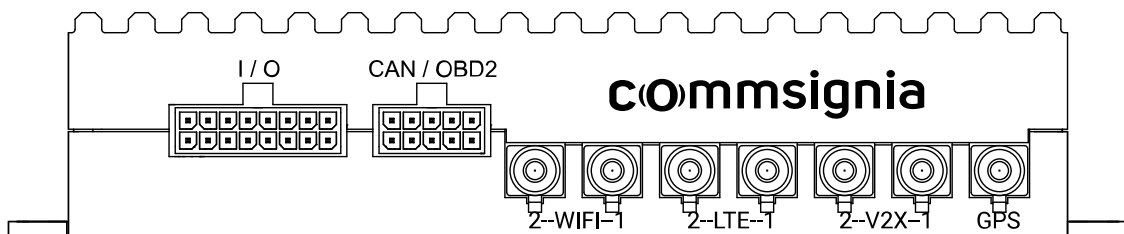
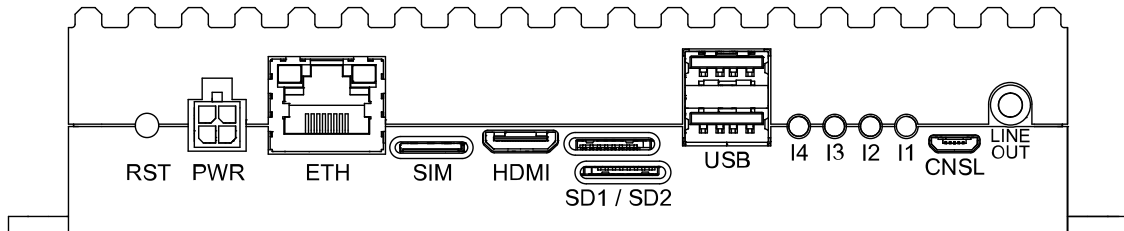


This Quick Start Guide is intended to provide information on the quick assembly and starting of the unit, for example for indoor testing purposes. The procedures described herein are only partial, and thus not sufficient for the proper assembly, installation, and commissioning of the unit. Please refer to the *OBU Installation and Commissioning Guide* for the complete description of procedures. It is the sole responsibility of the user to ensure that the device and its application complies with all necessary local, regional, national, and international radio frequency laws.

Package contents

1 × ITS-OB4 unit	1 × CAN cable	Optional accessories: 1 × Magnetic dome antenna HMI kit: 1 × Tablet 1 × Tablet holder 1 × Cigarette lighter splitter 1 × Cigarette lighter power supply
1 × Universal power supply	1 × GPIO cable	
1 × Cigarette lighter power supply	1 × USB Micro cable	
1 × Power cord	1 × Ethernet cable	
1 x FAKRA WiFi antenna		

Overview of the ITS-OB4-M unit



Antenna connections

The optional dome antenna has four cables with labels. Connect the cables according to the Overview page as follows:

- Label "694-894/1700-2700 MHz" denotes LTE connection; connect this to the connector labeled LTE--1 (the right LTE connector) on the the OBU.
- Labels "2.4-2.5/4.9-6.0 GHz" and "2.1-2.5/4.4-6.0 GHz" denote V2X connection; connect these to the connector labeled 2--V2X--1 in arbitrary order.
- Label "1575.42 MHz" (or if there is no label, the thin cable) denotes GPS connection; connect this to the connector labeled GPS on the OBU.

For connecting to the device wired or wireless connections can be used:

- For wired connection, connect the Ethernet cable to the socket labeled ETH on the OBU,
or
- For wireless connection, connect the FAKRA WiFi antenna to any of the two connectors labeled 2--WIFI--1 on the OBU.

For CAN integration, connect the Molex connector of the cable labeled CAN to the socket labeled CAN on the OBU.

For GPIO applications, connect the Molex connector of the cable labeled GPIO to the socket labeled I/O on the OBU.

Powering up the device

After all antenna connections have been made, the device can be powered up by connecting the Molex connector of either the universal or the cigarette lighter power supply to the 4-pin connector labeled PWR on the OBU. Connect the power supplies to the source as follows:

- If the universal power supply is used, connect it to the mains socket using the provided power cord.
- If the cigarette lighter power supply is used, connect it to the cigarette lighter socket of the vehicle.



Please note that Power-over-Ethernet (POE) is not supported on this device.

It can take 40–60 s for the device to fully start up after the power cable is connected, because its main board is powered only after the "SuperCap" backup circuitry is fully charged.

Connecting to the device

The device can be connected either through wired or wireless connection. The wired connection can be established via the Ethernet cable. The device can also be connected via its Wi-Fi access point: The SSID of the unit is **ITS-OB4-XXXXXXX**, where XXXXXXX is the last seven digits of the serial number of the unit, which can be found on the product label. The default Wi-Fi password can be found in the *OBU User Guide* available on the Support Portal.

Accessing the device

On wired (Ethernet) connection, the device can be accessed with IP address **192.168.0.54**. On wireless (Wi-Fi) connection, the device can be accessed with IP address **172.29.148.54** or, alternatively, with

domain name **my.cms.device/**. The default login password can be found in the *OBU User Guide* available on the Support Portal.

- Open a web browser and enter the appropriate IP address or domain name. Using the username **root** and the login password, access the graphical user interface (GUI) of the unit.
- Alternatively, the unit can be accessed via a command line interface (CLI) using secure shell (SSH) protocol. Open a terminal and enter `ssh root@192.168.0.54` for the wired or `ssh root@my.cms.device` for the wireless connection, and enter the login password.

Changing the passwords

It is strongly recommended to **change both the WiFi and the login passwords** after the first login. Detailed descriptions for changing both passwords can be found in the *OBU User Guide*.

Licensing

The device is delivered pre-licensed by Commsignia. No license activation is required.

Recycling of packaging materials



Boxes are made of cardboard, plastic bags are made of low-density polyethylene, and trays and paddings are made of expanded polyethylene. Please recycle all packaging materials.

Product support

Product support is available via e-mail at **support@commsignia.com** or by logging into the support portal at **support.commsignia.com**.



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 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.

Any changes or modifications made to this device that are not expressly approved by Commsignia, Inc. may void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.