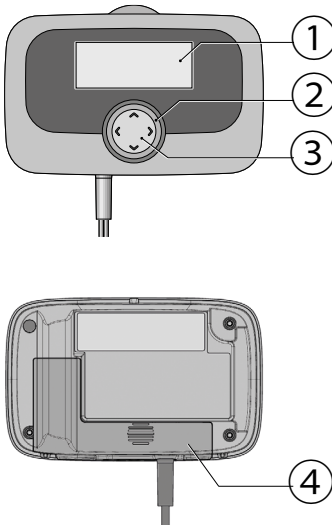




OBU2X-US

OBU2X-US
Installationsanleitung/Quick Start Guide
Guide de prise en main/Instrucciones de
instalación/Istruzioni brevi/Návod k instalaci/
Skrócona instrukcja/Instrucțiuni de instalare



Technical Data OBU2X-US

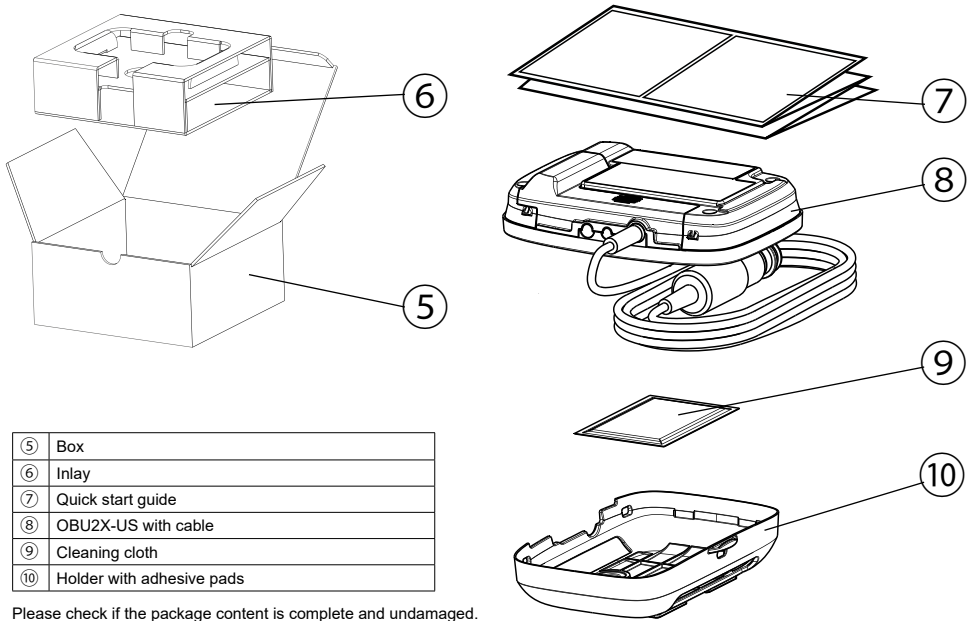
(A)	Operation, full functionality:	-40° to +140 °F (-40° to +60 °C)
	Operation, without V2X functionality:	+140° to 185 °F (+60° to +85 °C)
	Storage:	-40° to +185 °F (-40° to +85 °C)
(B)	8...32 V DC	
(C)	Power mode 'Suspend': 40 mW at 24 V DC	
	Power mode 'Run': 8 W at 24 V DC (typical)	
	Current consumption: 3A	
(D)	GNSS/GPS receiver module with internal antenna & optional external antenna	
(E)	4G module with internal antenna & optional external antenna	
(F)	OBU2X-US V2X Modul with internal antenna	
(G)	Lithium-Ion battery 3.6 V DC, 2100 mAh (satisfies UN transport test 38.3)	
(H)	IP54 acc. IEC 60529	
(I)	260 g (with battery)	
(J)	145 x 93 x 36 mm	
(K)	Frequency bands: LTE (4G) = B2, B4, B5, B8US, B12, B13, B25, B26, B66, B85	
	V2X= LTE Band 47, 5915 Mhz, BW 20 Mhz	
(L)	Max. transmitting power LTE & V2X: 25 dBm	BT & BT LE: 10dBm
(1)	Display	
(2)	Status indication	
(3)	Four direction navigation button	
(4)	Rear: battery compartment	

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Registered office
9225 Bee Cave Rd.
Building B Suite 201
Austin, TX 78733



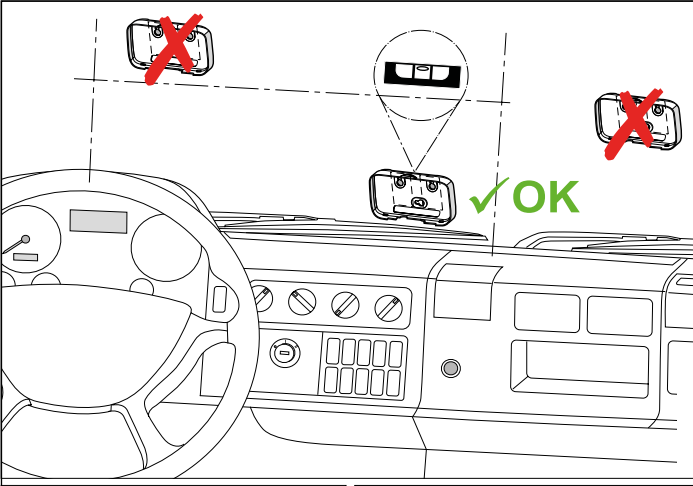
© 01 2023
A24708-E100-A50-04

FCC-ID: 2BGULOBU2X
Contains FCC-ID: RI7ME910G1W3



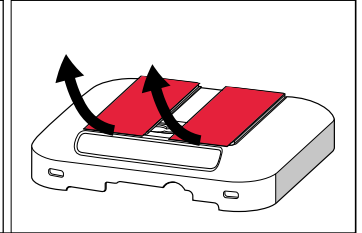
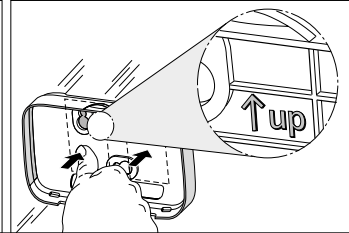
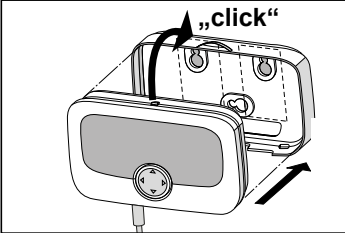
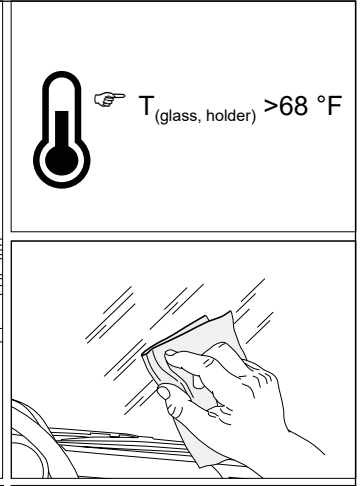
(5)	Box
(6)	Inlay
(7)	Quick start guide
(8)	OBU2X-US with cable
(9)	Cleaning cloth
(10)	Holder with adhesive pads

Please check if the package content is complete and undamaged.

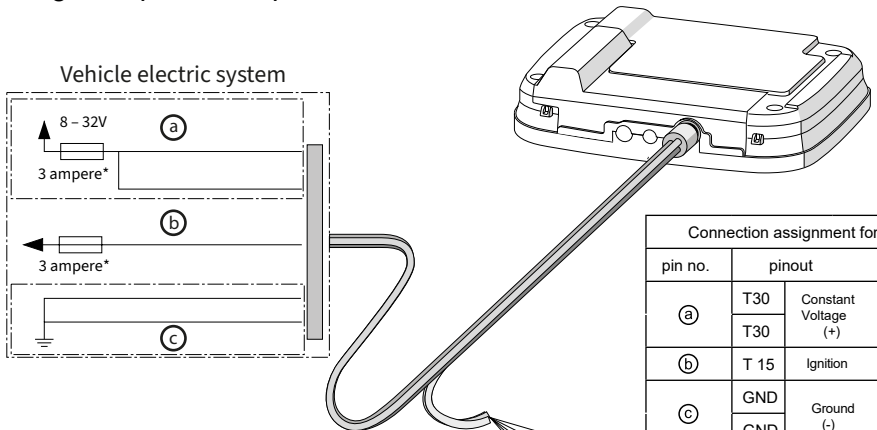


✓OK

T_(glass, holder) >68 °F



Usage with permanent power connection

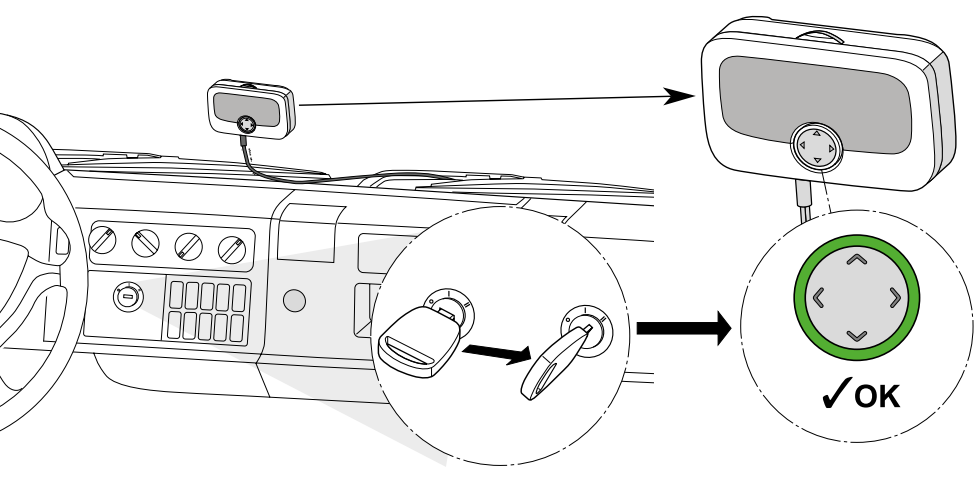


Connection assignment for 10-core cable			
pin no.	pinout	wire colour	
(a)	T30	Constant Voltage (+)	red
	T30		red
(b)	T 15	Ignition	black
(c)	GND	Ground (-)	brown
	GND		brown
(d)	RS485A		green
(e)	RS485B		yellow
(f)	GPIO		grey
(g)	CAN_H		pink-black
(h)	CAN_L		pink-white

* Fuses not included!
Caution: Don't use without 3 ampere fuse protection!

Usage with permanent power connection

As soon as you start the vehicle, the OBU is switched on automatically.



✓OK

General information on connecting the OBU2X-US cables

- Work on the electrics, such as contacting the on-board net work for permanent power connection, connecting RS485, CAN etc., may only be carried out by trained specialist personnel!
- For work on the vehicle's electrical system, always follow the vehicle manufacturer's instructions and recommendations.
- The T30 and T15 connections must be fused with 3 amps!

Connection assignment for 10-core cable		
pin no.	pinout	wire colour
1	T30	red
2	T30	red
3	GND	brown
4	GND	brown
5	T 15	black
6	RS485A	green
7	RS485B	yellow
8	GPIO	grey
9	CAN_H	pink-black
10	CAN_L	pink-white

Caution:
A minimum distance of 40cm between the OBU and the external antenna is necessary to comply with all requirements during simultaneous transmission.

Notes on safety:

Usage in potential explosive atmosphere:
The usage of OBU in potential explosive atmosphere in general is not permitted. For usage in potential explosive atmosphere please comply with procedure described in detailed instruction manual.

Danger caused by (rechargeable) battery:
Protect battery from mechanical strain (shock, drop, vibration) as well as temperatures >+185 °F (+85 °C)! Fire hazard! For further safety precautions and directives please follow detailed instruction manual.

Danger of obstructed line-of-sight:
Always mount the OBU in such a way that driver's field of vision is not impaired! If in doubt, please contact Customer Service.

Risk of accident:
Handling of the OBU while driving is not permitted! The navigation button is locked to prevent any operation during vehicle movement.

General instructions:
Do not operate the OBU with pointed or sharp-edged objects. For cleaning use only a damp cloth, no solvents or abrasive cleaners. Replace damaged power supply cables immediately – danger of fire by short circuit!

Hints for mounting:
In the OBU fixing area the windscreen must be clean, dry and free from grease or oil. Mounting the holder to the windscreen has to be done at temperature above +68 °F (+20 °C). If necessary, please bring windscreen and holder to appropriate temperature. At temperature > +68 °F (+20 °C), the glue of the adhesive pads reaches its final strength 72h after application.

Instructions for installation and commissioning:
The OBU2X-US (OBU) is an easy-to-install, reusable device. Initial set-up is carried out automatically.

Customer support:
If you have any queries about your OBU, please get in touch with your sales partner.

FCC Statement:
The OBU2X-US with part number L24708-E1000-B500 comply with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

FCC CAUTION - Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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

This product uses open source software.
Further information on this subject can be obtained from web page: www.siemens.com/mobility-sensunit-certificates **License terms**

Explanations:
Front: (1) display, (2) status-indication, (3) four direction navigation button
Rear: (4) battery compartment

Package content: (5) box, (6) inlay, (7) quick start guide, (8) OBU2X-US with cable, (9) cleaning cloth, (10) holder with adhesive pads

Technical Data:
(1) temperature, (2) voltage, (3) current consumption, (4) internal GNSS, (5) internal GSM, (6) internal V2X, (7) battery, (8) protection class, (9) weight (without holder), (10) dimensions (without holder), (11) frequency bands 4G (LTE), (12) transmitting power 4G (LTE)

Technical data made available by:
Yunex GmbH
Otto-Hahn-Ring 6
81739 Munich
Germany

Never dispose of this product in household garbage!