

# C4DONGLE-3GNA-WBT INSTALLATION GUIDE

V 1.0

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### **Preface**

The information contained in this installation guide is subject to changes in order to improve the reliability, design or features without prior notice. Mobile Devices Ingénierie reserves the right to make changes in the content without obligation to notify any person or organisation of such changes or improvements. Mobile Devices Ingénierie can in no event be held liable for technical or editorial errors or omissions herein, nor for incidental, special or consequential damages from the furnishing, performance or use of this installation guide.

Please contact our technical support for current updates and supplemental information concerning the use and operation of this or other Mobile Devices Ingénierie products.

## Warnings and notices



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Please read the installation guidelines, as well as the safety and operating instructions before operating your device. Follow all instructions and heed all warnings in the installation guide.

There is a risk of explosion if the battery is replaced by a wrong battery type. Please discard empty battery according to local regulations.





## 1. Hardware features

OBD Dongle			
Performance	Processor	ARM 11 - 500MHz	
	RAM	128 Mbytes	
	NAND Flash	256 Mbytes	
Power supply	External power supply 8- 32V	•	
	External voltage measurement	•	
	Li-pol battery	450mA.h	
Communication	Modem	3G US Data module (UE910)  GSM 850, PCS 1900  GGWCDMA FDD B2, B5	
	GSM antenna	Internal	
Positioning	GPS receiver	Sirf Atlas V (A-GPS on option)	
<u> </u>	GPS antenna	Internal	
Interface & Telematics features	(Micro) USB (2.0 Host)	powered (limited to 500 mA on 5V) optional	
	3D Accelerometer	±2g, ±4g, ±8g	
	3 axis Gyroscope	Please contact us	
	LED	1 (controlled by software)	
Product specific feature	Bluetooth	Bluetooth 4.0 BLE dual-mode (with internal antenna)	
	Wifi	IEEE Std 802.11n (with internal antenna)	
Environmental	Connectors	OBD connector	
		Micro USB	
	Operating temperature *	-25/+60°C	
	Dimensions	With OBD connector: 27x60,5x49,5 mm Without OBD connector: 27x48x49,5 mm"	
	SIM card	Slot	

OBD messaging protocols could be provided as an option (not included in standard catalogue)



<sup>\*</sup> Please read warnings section at the beginning of the installation guide



## 2. Hardware description

#### 2.1. External view

- 1. ODB connector
- 2. microUSB connector
- 3. LED





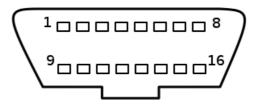
#### 2.2. Internal view

- 4. GSM antenna
- 5. GPS antenna
- 6. SIM holder
- 7. Internal battery\*



## 2.3 OBD connector pin out

Pin#	Comment
2	J1850+ (PWM/VPW)
4	Chassis ground
5	Signal ground
6	CAN High
7	K line
10	J1850- (PWM)
14	CAN low
15	L line
16	Battery voltage





<sup>\*</sup> Please read warnings section at the beginning of the installation guide



# 2.4 OBD adapter wires

This adapter is only used to connect the OBD to a computer (laptop/desktop).

Pin#	Wire color
2	Yellow
4	Black
5	Grey
6	Green
7	Blue
10	Violet
14	Orange
15	White
16	Red







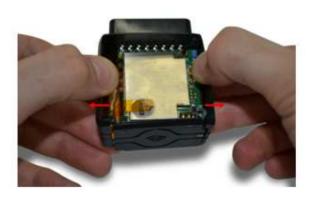
# 3. Preparing/installing the device

## 3.1. Open the device to insert a SIM card











The SIM card PIN must be deactivated

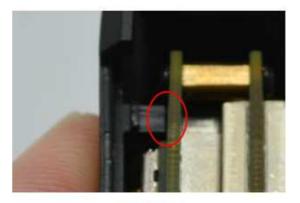




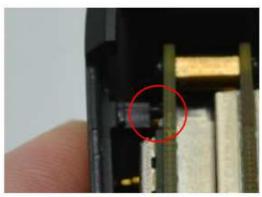
# 3.2. Properly close the device

First, check that the hole of the electronic card is correctly inserted in the plastic part. If it's not inserted proceed as shown below.









NOT GOOD

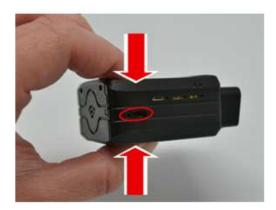
Second, insert the GPS antenna as shown below.







Third, check that the micro USB port is correctly inserted on its place. If it's not inserted proceed as shown below.







GOOD

NOT GOOD

Finally, insert the battery and place the screw.









## 3.3. Install the OBD Dongle

Connect the OBD Dongle on your vehicle OBD connector.

## 4. LED sequences

The Dongle has a two-coloured LED, green and red. When both colours are brightened, you can see an orange light.

Green LED		Red LED	
Sequence	Meaning	Sequence	Meaning
		Dongle OFF	OFF
No GPRS/No GPS	3 times (50ms ON/100ms OFF) 3550ms OFF		ON
No GPRS/Fix GPS	2 times (50ms ON/100ms OFF) 3700ms OFF	Ext. Power/Run	
GPRS OK/No GPS	1 time (50ms ON/100ms OFF) 3850ms OFF	LXI. FOWEI/Rui	ON
GPRS OK/Fix GPS	2000ms ON 2000ms OFF		
		Shutdown/Hibern ate	30ms ON / 1 s OFF
		ldle/Sleep	30ms ON / 1 s OFF

## 5. Support

For all questions not related in this installation guide, please contact the support team by email at <a href="mailto:support@mobile-devices.fr">support@mobile-devices.fr</a>

# 6. FCC Regulations:

This mobile phone 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 mobile phone 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 radiated 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. Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 7. RF Exposure Information

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.





## 8. IC Notice

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en

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

IC: 20253-C4DONGLE3G

## 9. IC Radiation Exposure Statement

This device complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the IC RSS-102 radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Cet appareil est conforme aux limites d'exposition aux rayonnements de la IC CNR-102 définies pour un environnement non contrôlé. Afin d'éviter la possibilité de dépasser les limites d'exposition aux fréquences radio de la IC CNR-102, la proximité humaine à l'antenne ne doit pas être inférieure à 20 cm (8 pouces) pendant le fonctionnement normal.

