From	Our Reference	Tel	Leonberg
XC-AC/ERI1	Robert Binder	+49 711 811 27411	28 May 2025

Report

-Issue	Version 1.0
Topic	**C6AB0 User Manual**
Description	User Manual ITA

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1 General Product Description

1.1 Description and operation principle

The Gen6 radar sensors and control unit (SCU) contains a FMCW radar transceiver operating in the globally harmonized frequency range of 76.0 - 77.0 GHz.
It senses targets by emitting many short frequency-modulated waves using the transmit antennas while receiving waves reflected by targets using the receiver antennas. Distance and relative speed are determined via beat frequency (due to travelling time of the waves) and phase differences between ramps (due to change of distance in short time). By using the antenna diagram the angles of departure and arrival of the radar waves can be determined.

Using the Bosch chirp sequence radar modulation, the Gen6 radar sensor allows unambiguous determination of relative speed in a single measurement cycle. Therefore, no complex object models are needed for ambiguity resolution.
The radar reflections (strength, distance and relative speed, angular direction, and derived values) are basis for building a comprehensive model of the sensed environment.

C6AB0 Senor outline (with Molex Side Connector)

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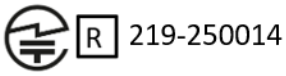
1.2 National Statements

1.2.1 European Union

This device should be installed and operated with minimum distance of 20 cm between the front of device and human body.

1.2.2 Japan

電波法
日本の電波法の遵守。この装置は、日本の電波法（電波法）に基づいて認可されています。
本製品の改造は禁止されていま す。（適合証明番号などが無効となります。）



Japanese Radio Law Compliance
This device is granted pursuant to the Japanese Radio Law. This device should not be modified (otherwise the granted designation number will become invalid).

1.2.3 Canada

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device must 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 compromettre le fonctionnement.
Radiofrequency radiation exposure Information:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.
Ce transmetteur ne doit pas être place au même endroit ou utilise simultanément avec un autre transmetteur ou antenne.

1.2.4 United States

This device complies with Part 95M 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.

Changes or modifications made to this equipment not expressly approved by Robert Bosch GmbH may void the FCC authorization to operate this equipment.

Radiofrequency radiation exposure Information:
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 20 cm between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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2.0 General remarks for service, repair and maintenance

- Repair and maintenance of the product is not allowed.
- Sensor can`t be opened without damaging.
- In case of service, the sensor needs to be replaced.

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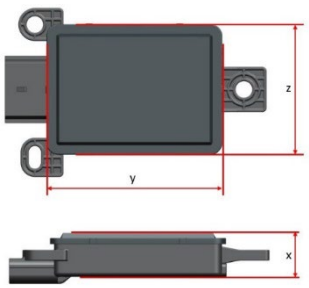
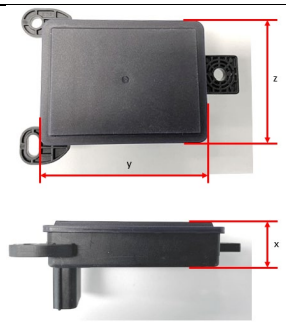
3.0 Technical Data

Model:	C6AB0
Operation Frequency Range	76 – 77 GHz
Output Power RMS (max., incl. tolerances)	24,23 dBm (EIRP)
Output Power Peak	35,85 dBm (EIRP)
Input Voltage	V_{min} = 6.7 VDC V_{nom} = 14,0 VDC V_{max} = 19,0 VDC
Power Consumption	~ 3.5 W (Average)
Temperature Range	T_{min} = -40°C T_{max} = +85°C
Weight	<100g

Dimensions:	Connector Type	Side Connector	Back Connector
y-direction <76mm z-direction <57mm x-dection 20mm	Molex		
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