



CANblue II

Active Bluetooth interface/bridge
1 x CAN (High-Speed)

The CANblue II is a reasonably priced and versatile CAN Bluetooth module, which can be used in a wide range of applications due three supported operation modes.

For service applications it enables e.g. the wireless access to CAN systems using the standard Bluetooth interface provided within many notebooks. Due to this, diagnostic data can be read or system configuration tasks can be performed very simple and flexible, even at components which are hard to reach.

Using several CANblue II devices network segments can be networked among each other. This enables the reliable connection of rotating or moving parts, e.g. in wind turbines, as well as the bridging of larger distances between different sub-systems up to 200 meters. Failure-prone slip ring connections or expensive installations of large CAN lines can such be avoided.

Not least, the Bluetooth-based communication also offers significant advantages in terms of range and noise immunity, compared to traditional WLAN solutions.



FEATURES AND BENEFITS

- Quick start-up and connection
- High transmission range
- Low latency transmission and high data throughput
- Flexible configuration options (combination of several CANblue II)

CONTENTS OF DELIVERY

- CANblue module and user's manual
- CAN driver VCI for Windows
- Simple CAN tool "canAnalyser Mini"

TECHNICAL SPECIFICATIONS

Bluetooth interface	Bluetooth v4.0 with EDR, 200 m max. transmission range
Microcontroller	32-bit microcontroller
CAN controller	CAN 2.0 A/B
CAN bus interface	ISO 11898-2, Sub D9 plug according to CiA 303-1
Galvanic isolation	1 kV, 1 sec.
Power Supply	9 - 30 V DC, 0.6 W
Temperature range	-40 °C to +85 °C

Sending delay (average)	approx. 4 ms (in Shortest Latency Mode)
CAN performance at 1 Mbit	100 % bus load
Certification	CE, FCC, Telec
Housing	Plastic housing with mounting holes
Protection Class	IP20
Size	82 x 64 x 26 mm

HOW IT WORKS

Bridge mode

The bridge mode allows the user to set-up a CAN-Bluetooth-CAN bridge by using two CANblue II devices. Message exchange occurs on layer 2 and is transparent. The device can also be used in systems with CANopen, DeviceNet or customer-specific protocols. CAN-ID filters can be set for data exchange via Bluetooth. Using more than 2 CANblue devices, multiple busses can be linked with each other.

ASCII/Binary protocol mode

In this mode, functions for transmitting and receiving CAN messages and for configuring the CANblue II are available to the user based on simple ASCII commands and optimized CAN binary messages. The CANblue II is ideal for "non-Windows" systems or embedded platforms.

PC operation mode with VCI driver support

Because it is supported by the VCI CAN driver, the CANblue II can be operated with all IXXAT tools and with customer-specified programs. In addition, wireless access to CAN systems via Bluetooth can also be easily achieved with existing VCI-based application programs and tools.



ACCESSORIES

FOR THE CANBLUE II VARIANT WITH EXTERNAL ANTENNA

- Antenna**
Stub antenna with RPSMA plug, 90 degree tiltable. (Technical data: Length 10 cm, 1 dBi, 2,4 Ghz, 50 Ohm impedance , half wave dipole, linear polarization.)
- Magnetic foot antenna**
Antenna with a strong magnetic foot for mounting, 1,5 m cable and RP-SMA connectors. (Technical data: Weight 109 g, diameter 47 mm, height 45 mm, designed for indoor use or outdoor use, provided that the antenna is protected against water and moisture.)
- Screwable antenna foot**
Screwable antenna foot with 2 m cable and RP-SMA connectors. (Technical data: Weight 80 g, diameter 28 mm, height 20 mm, diameter of the mounting hole 20 mm + 0.2 mm, designed for indoor use or outdoor use, provided that the antenna is protected against water and moisture.)



File	Version	Size	Read online
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Order number

1.01.0126.12000	CANblue II - With internal antenna
1.01.0126.12001	CANblue II - For usage with external antenna (Antenna not included in the scope of delivery)

Order number accessories

(for the CANblue II variant with external antenna)

1.04.0085.00001	External antenna
1.04.0085.00000	Magnetic antenna foot with 1,5 m cable and RP-SMA connectors
1.04.0085.00003	Screwable antenna foot with 2 m cable and RP-SMA connectors

Accessories

Product image	Type	Order number
	Sub-D9 Connector with CAN Termination	1.04.0075.03000
	CAN cable	1.04.0076.00180
	Y CAN cable	1.04.0076.00001
More accessories and detailed information...		