

CAN 2.0B Unit for Wireless/USB  
**CAN-2-WF**



\* Specifications, color and design of the products are subject to change without notice.

**Features**

**CAN communication function**

This product can expand the 2-channel CAN communication function to a PC.

This product is compliant with CAN2.0B communication, supporting communication speeds of up to 1Mbps.

Each channel is controlled by an individual CAN controller, allowing each channel to communicate independently of the status of other channels.

**Compatible to USB2.0/USB1.1 and bus power-driven eliminating the need for external power**

Compatible to USB2.0/USB1.1 and capable to achieve high speed transfer at HighSpeed (480 Mbps).

The product is driven by bus power from USB, which eliminates the need for external power.

\* The wireless LAN cannot be used when this product is connected via USB. When using the wireless LAN, supply power externally.

**Includes a separate send/receive buffer for each channel**

A separate 16 message FIFO buffer for sending and receiving is provided at each channel.

**Capable of adapting a wide-range power (10 - 32VDC)**

The product is capable of dealing with a wide range of power in the differing environments.

Power connector also has a FG terminal.

**Terminating Resistor Function within**

The terminating resistor of each channel can be enabled/disabled using the DIP switch on the unit.

**Provide device drivers compatible with Windows/Linux**

Windows/Linux applications can be created by using the device driver API-TOOL provided on our website.

**Compatible with 4 standards, IEEE802.11n/a/b/g**

You can choose 4 ch (W52 \*1) in the 5 GHz (IEEE802.11n/a), and in the 2.4 GHz (IEEE802.11n/g/b), you can choose from 1 to 11ch. So, it is possible to design a flexible wireless network to adjust a radio wave interference.

\*1 W52 : 36, 40, 44, 48ch

**Packing List**

- Product [CAN-2-WF] ...1
- Power Connector ... 1
- USB Cable [Type-A → Type-C, 1.8m] ... 1
- Simplified EU DoC ... 1
- Please read the following ... 1

This product is a converter unit that expands the CAN communication function via a wireless LAN connection or a PC USB port.

It complies with four standards: IEEE802.11n/a/g/b and allows for wireless communication with a PC running.

This product is compliant with CAN2.0B communication, supporting communication speeds of up to 1Mbps.

It includes a USB Type-C port and can operate using the bus power from the host.

Windows/Linux driver is supported with this product.

- \* The contents in this document are subject to change without notice.
- \* Visit the CONTEC website to check the latest details in the document
- \* The information in the data sheets is as of April, 2025.

**Specifications**

**Function specification**

Item	Description
<b>CAN</b>	
Communication method	CAN2.0B
Communication speed	1Mbps (Max.)
Number of channels	2
CAN transceiver	TCAN1042 (T.I) or equivalent (ISO11898-2 (2016) compliant)
Transmission buffer	16 messages/ch
Reception buffer	16 messages/ch
Terminating resistor	120Ω (Each channel can be disconnected individually using the unit DIP switches)
Connector	9pin D-SUB connector [male]
<b>USB</b>	
Bus specification	USB Specification 2.0/1.1 standard
USB transfer rate	12Mbps (Full-speed), 480Mbps (High-speed) *1
Cable length	1.8m
Power supply	Bus power/Self power *2
Connector	Type-C USB connector
<b>Wireless LAN *1</b>	
Wireless Networking Standard	IEEE802.11n, IEEE802.11a, IEEE802.11g, IEEE802.11b
<b>IEEE802.11n</b>	
Channels	5GHz band : 4ch(36, 40, 44, 48ch(W52)), 2.4GHz band : 11ch(1 - 11ch)
Data transmission speed *2	65Mbps (Max.)
<b>IEEE802.11a</b>	
Channels	4ch (36, 40, 44, 48ch(W52))
Data transmission speed *2	54Mbps (Max.)
<b>IEEE802.11g</b>	
Channels	11ch (1 - 11ch)
Data transmission speed *2	54Mbps (Max.)
<b>IEEE802.11b</b>	
Channels	11ch (1 - 11ch)
Data transmission speed *2	11Mbps (Max.)
Security	OPEN, WEP (128bit), WPA-PSK(AES, TKIP), WPA2-PSK(AES, TKIP)
Antenna	Chip-antenna x 1 SISO
<b>Power supply</b>	
Rated input voltage	10 - 32VDC
Power consumption	Bus power : 5VDC 330mA (Max) Self power : 10VDC 170mA (Max), 32VDC 60mA (Max)
Connector	European type terminal 3.5mm pitch 3pin jack connector 9pin D-SUB connector [male]
<b>Common</b>	
Physical dimensions (mm)	100(W) x 80(D) x 30(H) (No projection included)

Item	Description
Weight	150g (Not including the USB cable, attachment)
Software	
Supported software	API-J2534(WDM) *3, API-CAN(WDM) *4, API-CAN(LNX) *4
Supported protocols	RawCAN, ISO-TP(ISO15765-2) *5

- \*1 USB transfer rate is depend on the environment of the host PC (OS, USB host controller) being used.
- \*2 Can operate with both bus power and self-power supply.
- \*3 The wireless LAN cannot be used when this product is connected via USB.  
When using the wireless LAN, supply power externally.
- \*4 The data transmission speeds are the maximum theoretical values and do not indicate actual data transmission speeds.
- \*5 Compliant with SAE J2534 version 04.04 (Pass-Thru)
- \*6 This is available in firmware version 2.11 or higher.
- \*7 Supported only by API-J2534(WDM)

**Installation Environment Requirements**

Item	Description
Operating ambient temperature	-20 - +60°C *1
Storage Temperature	-20 - +60°C
Operating ambient humidity	10 - 90%RH (No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None
Line-noise Resistance	Line noise
	Static electricity resistance
Vibration resistance	Sweep resistance
Shock resistance	
Standard	

\*1 When using the separately sold AC adapter POA201-10-2, this is 0 - +40°C

**Optional Products**

Product Name	Model type	Description
AC adapter	POA201-10-2	12VDC, 1.0A *1

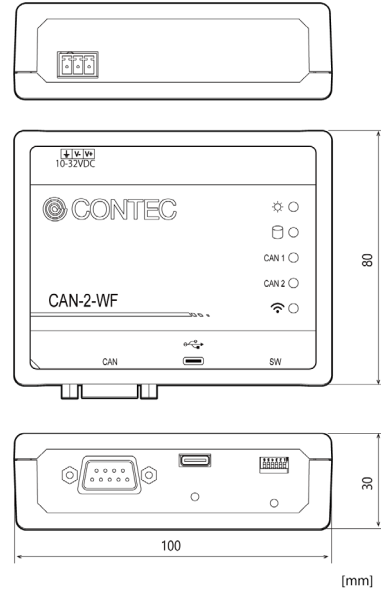
- \*1 The operating ambient temperature is 0 to 40°C.
- \* Information about the option products, see the Contec's website.

**Support Software**

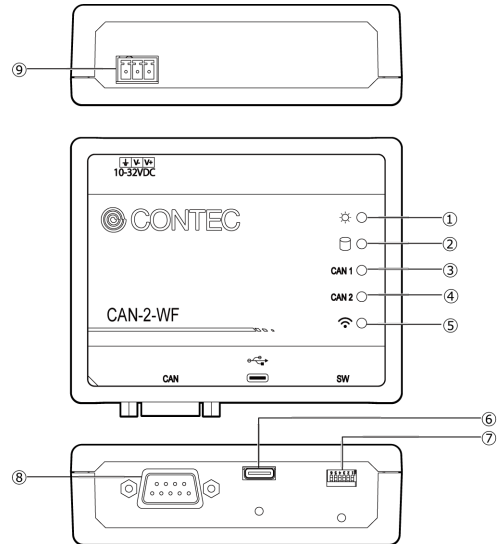
Name	Contents	How to get
Windows Version Driver software for CAN SAE J2534 API-J2534(WDM)	The Windows device driver is provided as a form of Windows API functions. It supports CAN communication which conforms to J2534-1 REV. DEC2004 (Pass-Thru) established by SAE.	Download from the CONTEC website
Windows Version CAN Communication Driver software API-CAN(WDM) *1	The Windows device driver is provided as a form of Windows API functions. Various sample programs such as C# and Visual Basic .NET, The software includes various sample programs such as C#, Visual Basic .NET, Visual C++ and Python.	Download from the CONTEC website
Linux Version CAN Communication Driver software API-CAN(LNX) *1	This is the Linux device driver, which is provided as a shared library. The software includes various sample programs such as gcc (C, C++) and Python programs, as well as a configuration tool to configure the device settings.	Download from the CONTEC website

\*1 This is available in firmware version 2.11 or higher.

**Physical Dimensions**



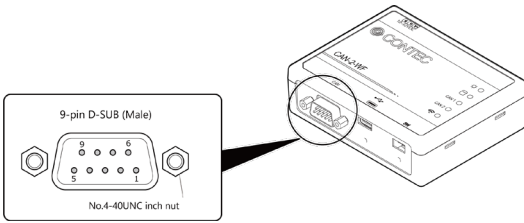
**Component Name**



No.	Name	No.	Name
1	POWER LED	6	USB Port (Type-C)
2	STATUS LED	7	DIP Switch
3	CAN 1 LED	8	CAN Port (Male)
4	CAN 2 LED	9	Power Connector
5	WLAN LED		

## CAN Port

This product is equipped with 2 ports for CAN Ports.

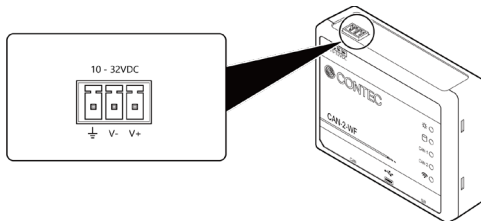


Pin No.	Signal Name	Description
1	N.C.	Do not connect
2	CAN 1_L	CAN 1 signal (Low)
3	GND	Ground
4	CAN 2_L	CAN 2 signal (Low)
5	GND	Ground
6	GND	Ground
7	CAN 1_H	CAN 1 signal (High)
8	CAN 2_H	CAN 2 signal (High)
9	CAN_V+	Power supply input (10 - 32VDC) *1

\*1 The power supply input specifications are the same as the specifications for the external power supply connection from the power supply connector.  
For detailed power supply specifications, see "Power Supply Connector."

## Power Supply Connector

Connect this product to the external power supply with the supplied power input connector. The supported cable is AWG28 - 16. When using a commercially available DC output power supply, follow the same procedure described here. The product can also be operated by USB bus power without using an external power supply. [Connector used on the product] : European type terminal 3.5mm pitch 3-pin jack connector



### Pin Assignment

Mark	Signal Name
⏏	Frame ground
V-	Power supply (GND)
V+	Power supply (10 - 32VDC)

### CAUTION

When using in a high noise environment, connect the FG pin to ground (earth).

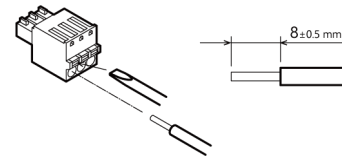
When supplying power using the included 3-pin connector, strip off approximately 8±0.5mm of the wire's covering, and then insert this stripped part into the connector's opening.

While pushing the orange part in the center of the connector with a precision screwdriver or a similar tool, insert the cable into the round connection hole.

After that, release the pushed part to fix the cable in place.

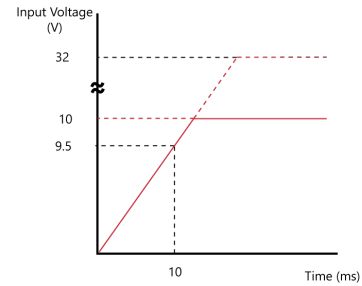
### CAUTION

Disconnecting the connector by pulling on the cable may result in a broken wire.



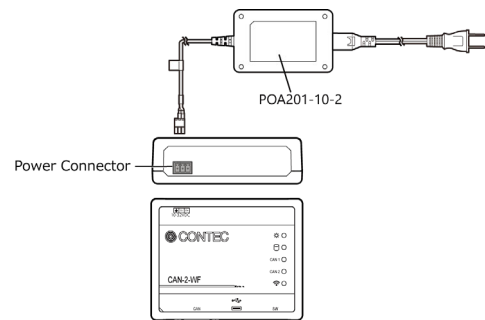
### About a power rise

Input voltage range : Use a power supply with an input voltage range of 10 - 32VDC, and that rises to 9.5VDC or more within 10ms. A power supply that does not rise to this level may cause a product failure or accident



### Connecting an external power supply

When using the separately sold AC adapter POA201-10-2, connect the connector included with that product to the power supply connector. Use an external power supply as necessary for the environment and application.



### CAUTION

- Input power specification required by the product : 10 - 32VDC, 0.17 - 0.06A(Max)
- When the product is not used, leave the 10 - 32VDC power supply (such as the separately sold AC adapter) unplugged.
- Connect the 10 - 32VDC power supply (such as the separately sold AC adapter) to the power supply connector of the product first. When unplugging, unplug it from the power outlet side of the AC adapter first.
- Grasping the cable to remove the power supply connector of the 10 - 32VDC can break the wire. Always grasp the connector to remove it.
- Using the separately sold AC adapter in a heated state continuously affects its life.
- Use the separately sold AC adapter not in a closed place but in a well-ventilated place to prevent the product from being overheated.
- Do not remove the power supply connector [MC1,5/3-ST-3,5] that is attached to the separately sold AC adapter.
- When the 10 - 32VDC power supply is supplied, do not disconnect the 10 - 32VDC power supply from the power supply connector.
- If you use this product in a noisy environment, connect the FG pin of the product to the ground (earth) to stabilize the operation.