

CAN 2.0B Unit for USB CAN-2-USB



* 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.

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.

Packing List

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

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.

This product is a CAN/USB converter unit that connects to a PC USB port and expands the CAN communication function.

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
CAN	
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]
USB	
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
Power supply	
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]
Common	
Physical dimensions (mm)	100(W) x 80(D) x 30(H) (No projection included)
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 Compliant with SAE J2534 version 04.04 (Pass-Thru)

*4 This is available in firmware version 2.11 or higher.

*5 Supported only by API-J2534(WDM)

Installation Environment Requirements

Item		Description
Operating ambient temperature		-20 - +60°C airflow 0.7m/s *1 -20 - +55°C without air flow*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	AC Line/±2kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3) Signal Line/±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Touch/±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air/±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance	10 - 57Hz /semi-amplitude vibration 0.15mm, 57 - 150Hz/2.0G 40minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)
Shock resistance		147m/s ² (15G) half-sine shock for 11ms (JIS C60068-2-27-compliant, IEC60068-2-27-compliant)
Standard		VCCI Class A, FCC Class A CE Marking (EMC Directive Class A, RoHS Directive), UKCA, ISED, RCM, KC

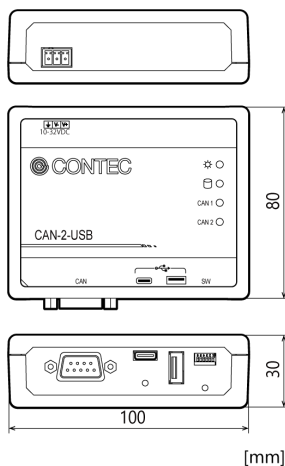
*1 When using the separately sold AC adapter POA201-10-2, this is 0 - +40°C

Support Software

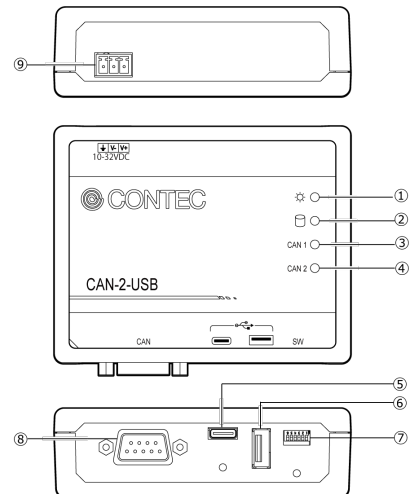
Name	Contents	How to get
Windows Version Driver software for CAN SAE J2534 API-J2534(WDM)	The Windows device driver is provided as a form of Windows API functions. It supports CAN communication which conforms to J2534-1 REV. DEC2004 (Pass-Thru) established by SAE.	Download from the CONTEC website
Windows 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



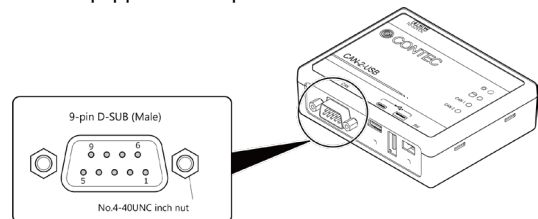
Component Name



No.	Name	No.	Name
1	POWER LED	6	USB Port [Type-A] *Not used
2	STATUS LED	7	DIP Switch
3	CAN 1ch LED	8	CAN Port (Male)
4	CAN 2ch LED	9	Power Connector
5	USB Port [Type-C]		

CAN Port

This product is equipped with 2 ports for CAN Ports.

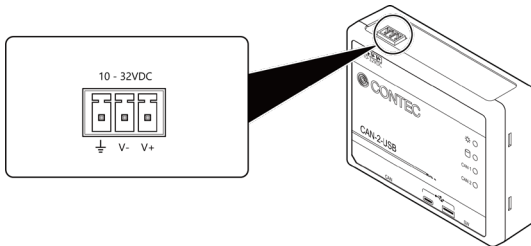


Pin No.	Signal Name	Description
1	N.C.	Do not connect
2	CAN 1_L	CAN 1 signal (Low)
3	GND	Ground
4	CAN 2_L	CAN 2 signal (Low)
5	GND	Ground
6	GND	Ground
7	CAN 1_H	CAN 1 signal (High)
8	CAN 2_H	CAN 2 signal (High)
9	CAN_V+	Power supply input (10 - 32VDC) *1

*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).

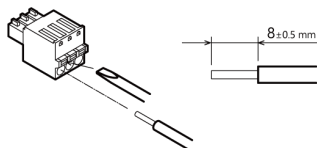
When supplying power using the included 3-pin connector, strip off approximately 8 ± 0.5 mm of the wire's covering, and then insert this stripped part into the connector's opening.

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.

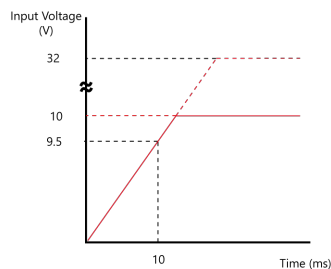
CAUTION

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



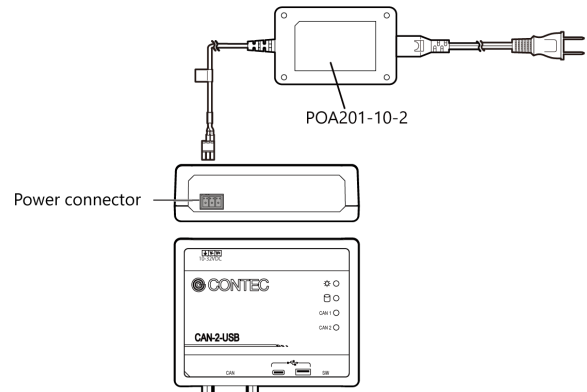
About a power rise

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.