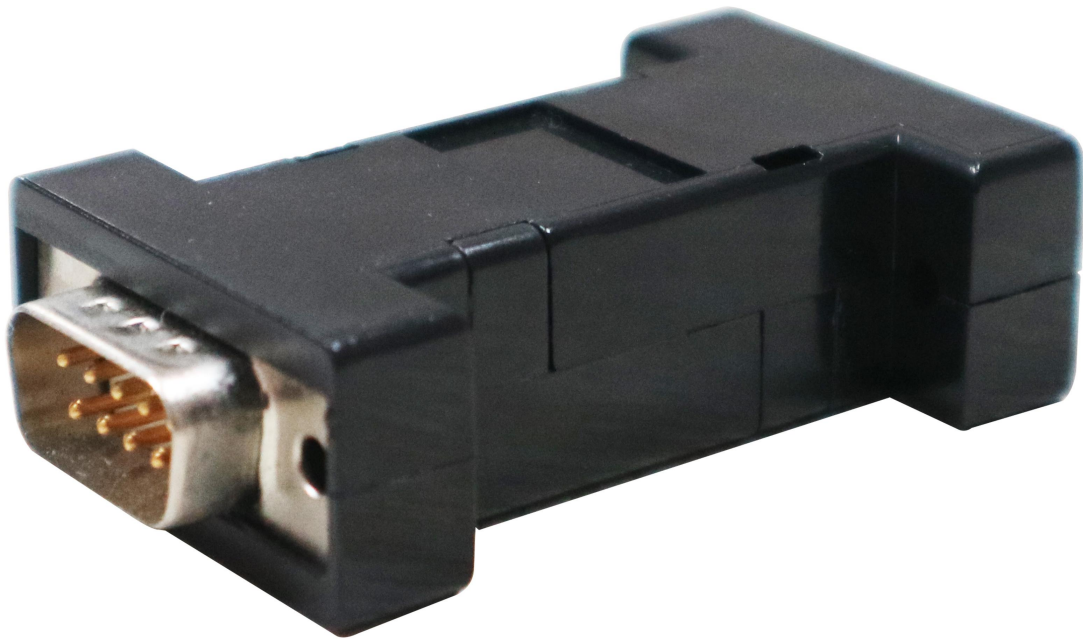


# GCAN-404

Industrial single-wire CAN converter



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# 1 Introduction

## 1.1 Functional overview

The GCAN-404 converter establishes a connection between a High-speed CAN-Bus (ISO 11898-2) and a Single-wire CAN-Bus (SAE J2411). A High-speed CAN-Bus use two signal line, which are CAN\_H and CAN\_L. However, a Single-wire CAN-Bus only use one signal line.

One of the most important potential applications of GCAN-404 is a simple connection between a High-speed CAN-Bus(e.g. USBCAN-II Pro) and a Single-wire CAN-Bus. With this converter, equipment that used Single-wire CAN-Bus can connect to a High-speed CAN-Bus without changing the hardware structure, this makes multi-Bus interconnection very flexible, and extends the application scope of a High-speed CAN-Bus.

## 1.2 Properties at a glance

High-speed CAN-Bus supports CAN2.0A and CAN2.0B frame format, conforms to ISO/DIS 11898 standards

High-speed CAN-Bus and Single-wire CAN-Bus support the baud rate of 33.33K(Normal) and 83.33K(High-speed)

CAN-Bus interface with electrical isolation

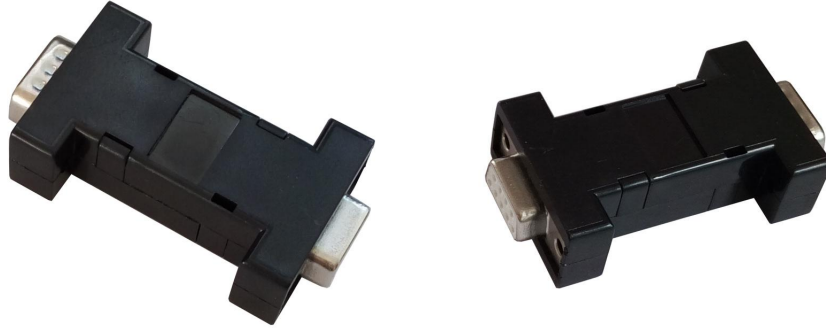
CAN-Bus isolation module insulation voltage: DC 1500V

Working temperature range from -40 to +85°C

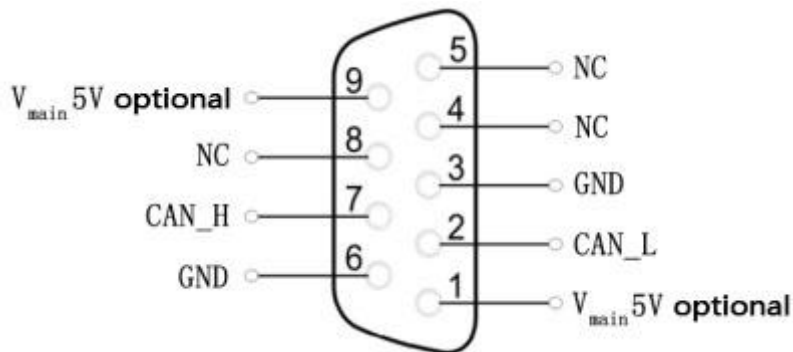
Size: (L)63mm \* (W)34mm \* (H)19mm

## 2. Device installation

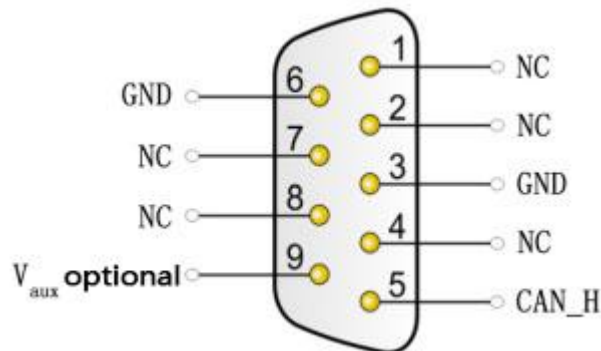
### 2.1 Exterior



### 2.2 Interface



High-speed CAN terminal DB9 interface definition (female)



Single-wire CAN terminal DB9 interface definition (male)

#### 2.2.1 Power supply

GCAN-404 does not need to add the power supply.

#### 2.2.2 High-speed CAN termination resistor

GCAN-404 does not add termination resistor. If you need, please add it by yourself.

### **2.2.3 Single wire CAN connected to GND**

Single-wire CAN terminal GND pin must be grounded.

### **2.2.4 Single wire CAN termination resistor**

Single-wire CAN does not need to connect termination resistor.

## **3. Instructions for use**

### **3.1 Running mode**

The GCAN-404 supports normal mode (33.33Kbit/s) and high speed mode (83.33Kbit/s). Both modes can be switched automatically.

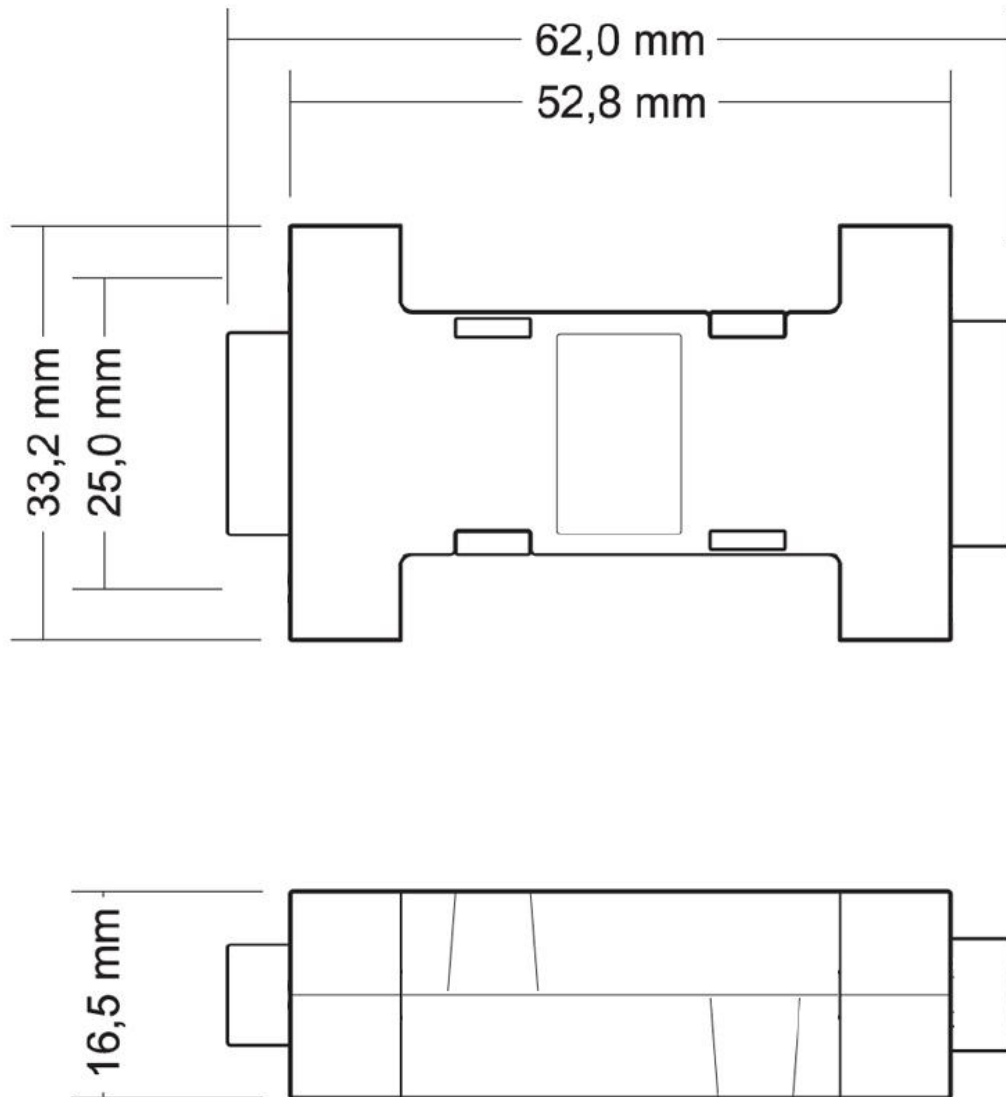
### **3.2 CAN-Bus baud rate**

When the user uses GCAN-404, it is necessary to ensure that the baud rate of the High-speed CAN is consistent with that of the single-wire CAN. The most common single-wire CAN baud rate: 33.33Kbit/s, 83.33Kbit/s.

## 4. Technical specifications

<b>High-speed CAN specification</b>	
CAN standard	ISO 11898 CAN2.0A、CAN2.0B
Connection method	DB9 female, 9pin, pin assignment conforms to CiA102 rule
120 ohm resistance	Not integrated
CAN baud rate	33.33Kbit/s、83.33Kbit/s
<b>Single-wire CAN specification</b>	
CAN standard	SAE J2411
Connection method	DB9 male, 9pin
120 ohm resistance	Not integrated
CAN baud rate	33.33Kbit/s、83.33Kbit/s
<b>Basic Information</b>	
Dimensions	63mm*34mm*19mm
Weight	26g
<b>Operating environment</b>	
Operating temperature	-40℃~+85℃
Working humidity	15%~90%RH, No condensation
EMC	EN 55024:2011-09 EN 55022:2011-12
Degree of protection	IP20

## Appendix





## Sales and service

### **Shenyang Guangcheng Technology Co., Ltd.**

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