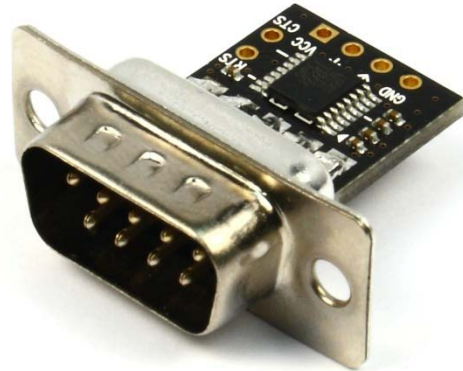
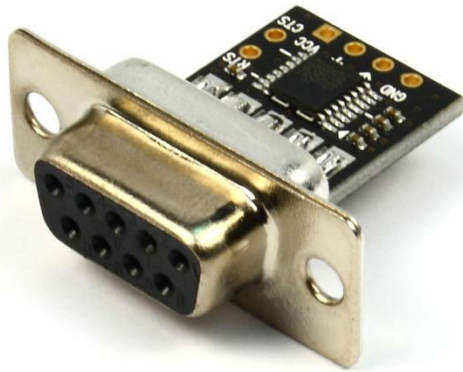


NS-RS232

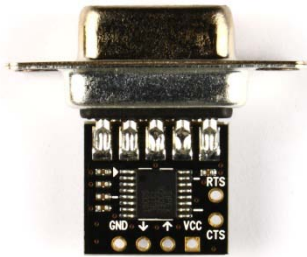
User Manual



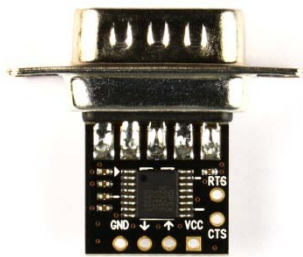
Copyright © NulSom Inc. All Rights Reserved.

■ NS-RS232 Feature

- Convert **TTL** (Transistor-Transistor Logic) level signals to **RS232** interface
- D-SUB 9pin(RS232) connector mounting
- Supports 3V ~ 5.5V power supply (You can use this on both your 3.3V and 5V projects.)
- RTS, CTS optionally available pin



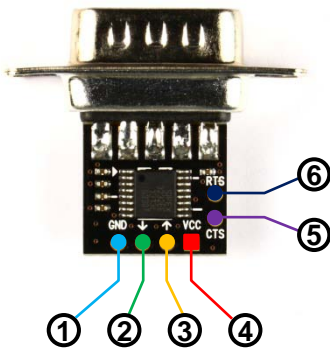
< NS-RS232-01 >



< NS-RS232-02 >

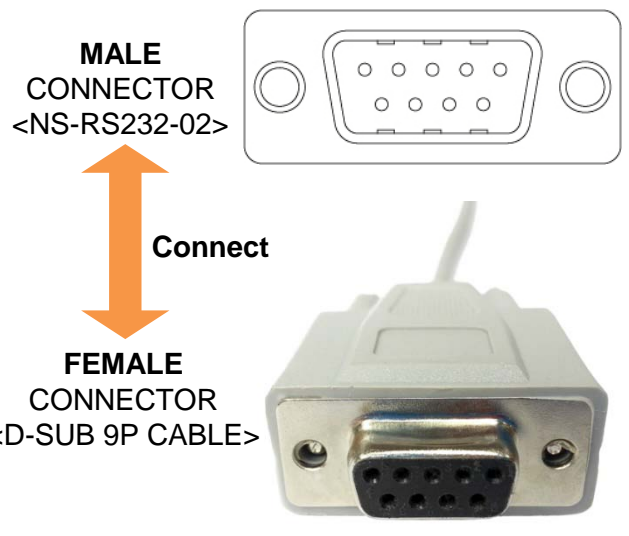
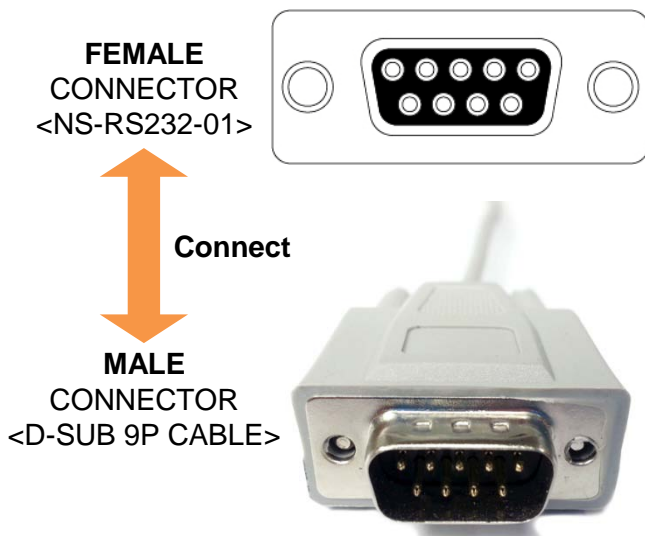
Series Name	NS-RS232
Operating Voltage	3V ~ 5.5V
Connector	D-SUB 9pin
IC	SP3232E
Pitch	2.54mm
PinOut	1X4, 1x2

■ Pin Assignment



Pin	Name	Signal
①	GND	Ground
②	↓ (TX)	Transmit Data
③	↑ (RX)	Receive Data
④	VCC	Supply Voltage
⑤	CTS	Clear To Send
⑥	RTS	Request To Send

■ Connection



■ NS-RS232-01 Basic Specification

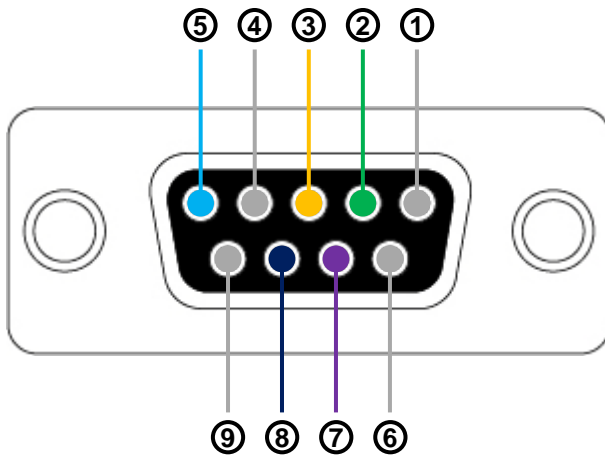


< NS-RS232-01 Front >

< NS-RS232-01 Back >

Model	NS-RS232-01
Connector	D-SUB 9pin (FEMALE)
Board size	15mm * 14mm

■ Pin Assignment (DB9 Female Connector)

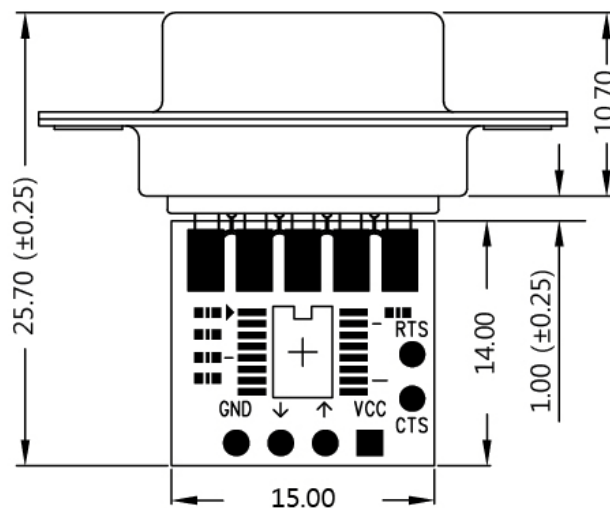


FEMALE CONNECTOR
< NS-RS232-01 >

No.	Name	Signal
①	NC	Do not used
②	TX	Transmit DATA
③	RX	Receive DATA
④	NC	Do not used
⑤	GND	Ground
⑥	NC	Do not used
⑦	CTS	Clear to send
⑧	RTS	Request to send
⑨	NC	Do not used

■ Dimensions

(unit : mm)



■ NS-RS232-02 Basic Specification

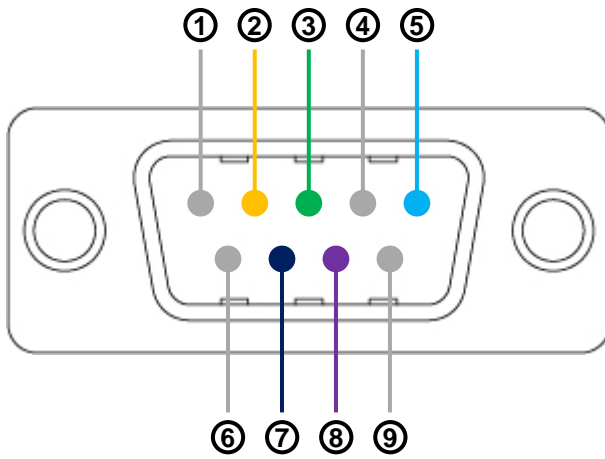


< NS-RS232-02 Front >

< NS-RS232-02 Back Side >

Model	NS-RS232-02
Connector	D-SUB 9pin (MALE)
Board size	15mm * 14mm

■ Pin Assignment (DB9 Male Connector)

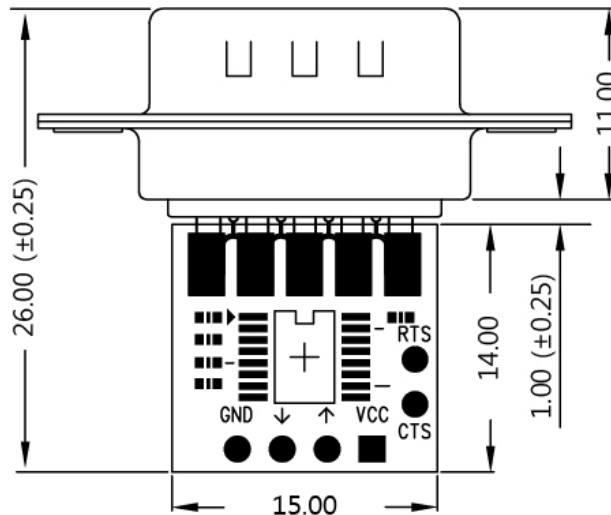


MALE CONNECTOR
< NS-RS232-02 >

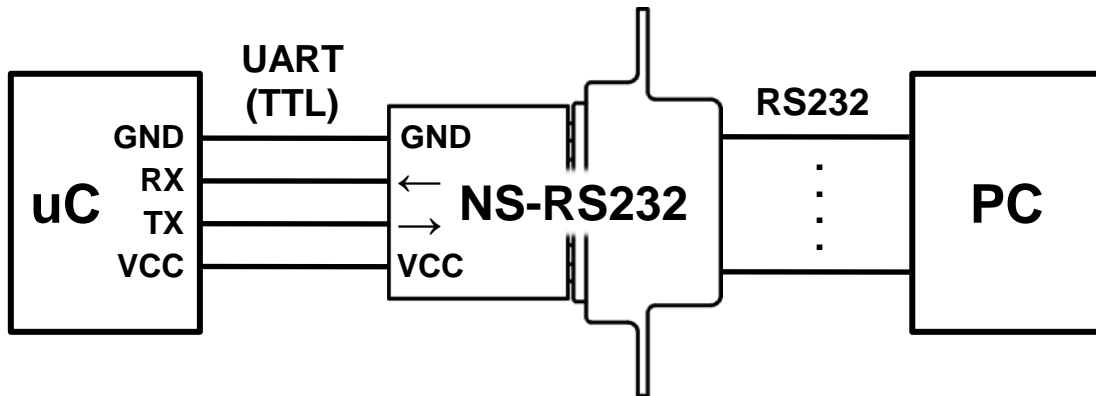
No.	Name	Signal
①	NC	Do not used
②	RX	Receive DATA
③	TX	Transmit DATA
④	NC	Do not used
⑤	GND	Ground
⑥	NC	Do not used
⑦	RTS	Request to send
⑧	CTS	Clear to send
⑨	NC	Do not used

■ Dimensions

(unit : mm)

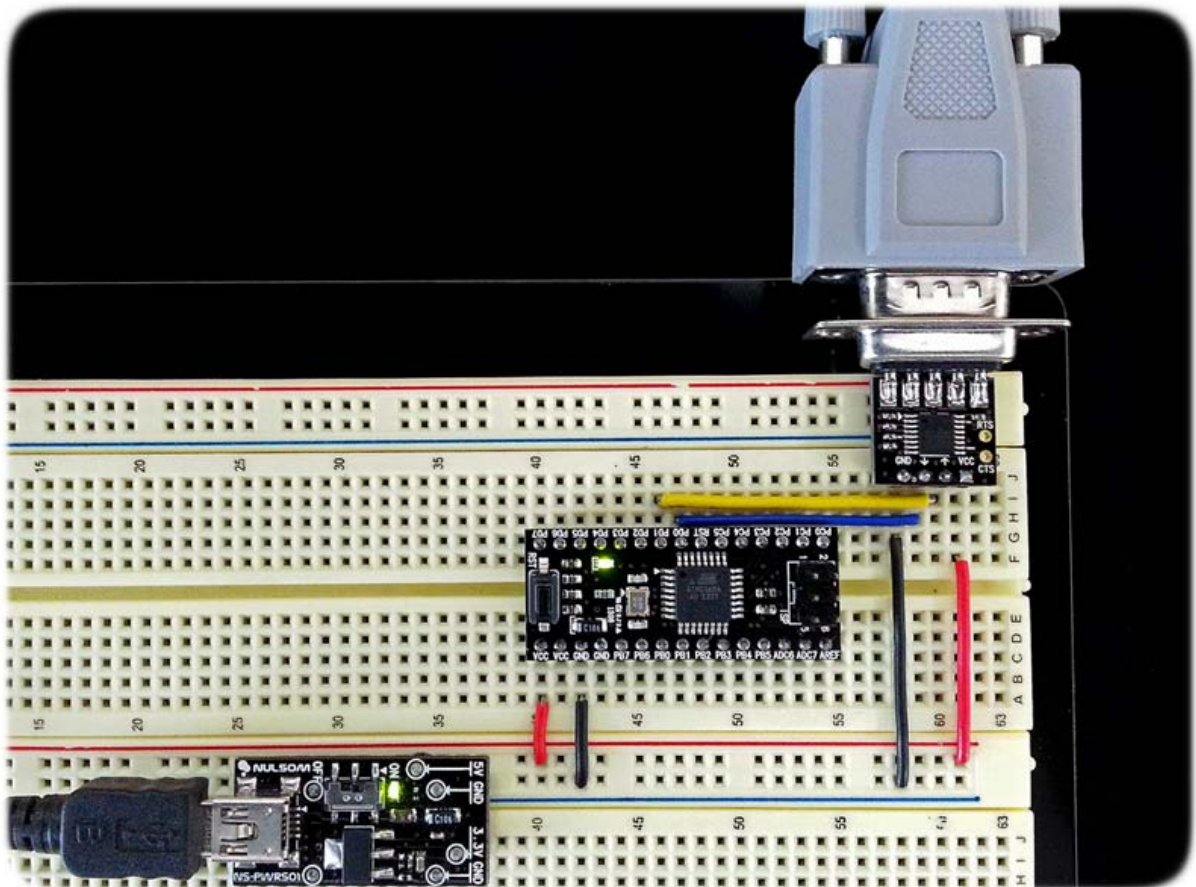


■ Cable Connection Diagram



■ Applications

- The converter typically can operate at a data rate of 235Kbps (230,400bps).
- The drivers can guarantee a data rate of 120Kbps (115,200bps) fully loaded with 3KΩ in parallel with 1,000pF, ensuring compatibility with PC-to-PC communication software.



* NS-AT8-S and NS-PWRS01 are not included

■ **Assembled Converter and Hood**

- The module is ultra tiny and it will fit in most D-sub hood.



< NS-RS232-01 + Hood >



< NS-RS232-02 + Hood >