

CS-428/9AT mini



» Features

- Smallest size in the world
- Fully compatible with PC serial COM ports
- No external power needed. Uses non-polar T/B when operating with external power.
- Enables the use of external DC power supply (7~12V) Built in Surge Protector
- Auto Toggling by hardware (CS-428/9AT model only)
- Communication status can be monitored through LEDs
- Dip switch for selecting RS422/485 modes, Terminal Resistance and Echo mode
- Max. 10 Device Connectivity for RS422 Multi-Drop Mode
- Max. 32 Device Connectivity for RS485 Mode

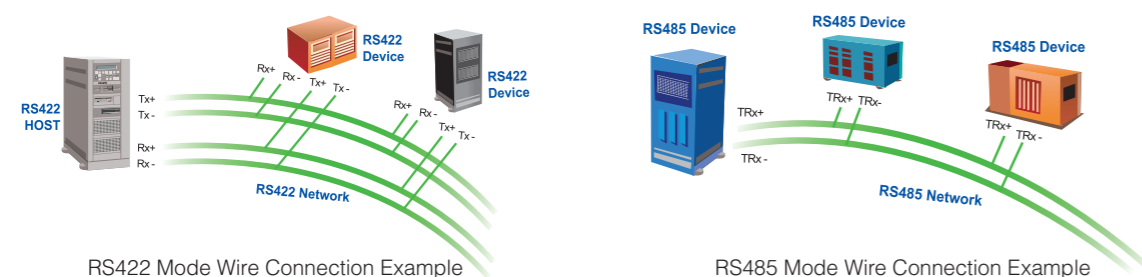
Overview

CS-428 9AT-mini converts RS232 signals to RS422 or RS485. It is an efficient solution applying advantages of RS422/485 to RS232 devices. It operates with no extra software installation and with simple DIP switch toggling, RS422 or RS485 can be selected. Also, the product is fully compatible with serial COM port in PC.

Auto RTS Control (Auto Toggling)

Under 1:N communication environment, it is undesirable that multiple devices send data at once, causing electrical collision that leads to an error. In order to prevent this, only one device needs to send data at a time which means that data I/O control is necessary at certain points. CS-428/9AT-mini performs automatic toggling by hardware, saving extra programming work.

RS422/485 Wire Connection



What is RS485 Echo Mode?

Different from RS485 Non-echo mode, RS485 Echo Mode enables the output signal line to function as the input signal. Therefore, it is not necessary to read the echoed data to confirm whether the data sent crashes with another. Echo mode is scarcely used except in some special purposes. On CS-428/9AT, all operation is controlled by hardware circuit so no additional condition is required by application program.

Using 4-Wire RS485

4-Wire RS485 networking is same as RS422 Multi-Drop networking. RS422 device is used as master and RS485 device as slave in 4-Wire RS485 bus. Although RS422 and RS485 have different electrical standards, most manufacturers make ICs that use both RS422 and RS485 interface. Therefore, RS422 Multi-Drop and 4-Wire RS485 can be considered equal.

However, there can be a difference in software that controls them. Since our device can operate regardless of the application software, there is no problem to use. In this case, RS422 Multi-Drop mode setting is necessary.

Specification

Serial

Speed	Up to 115.2 kbps
Distance	Max. 1.2Km @115.2Kbps,24AWG twisted pair cable
Connector	RS232 : DB9 Female (Male : optional) RS422/485 : Terminal Block 5P
Signals	TXD, RXD, RTS, CTS, GND for RS232
Protection	15KV Surge Protection for all signals
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
RS422 mode	Point-to-Point, Multi-Drop
RS485 mode	Echo, Non-Echo
RTS Control	CS-428/9AT : Auto Toggling
Switch	- RS422/485 selection - RS485 Echo/non-Echo selection - RS422 Term. Resistor setting - RS485 Term. Resistor setting

Converter

Environmental

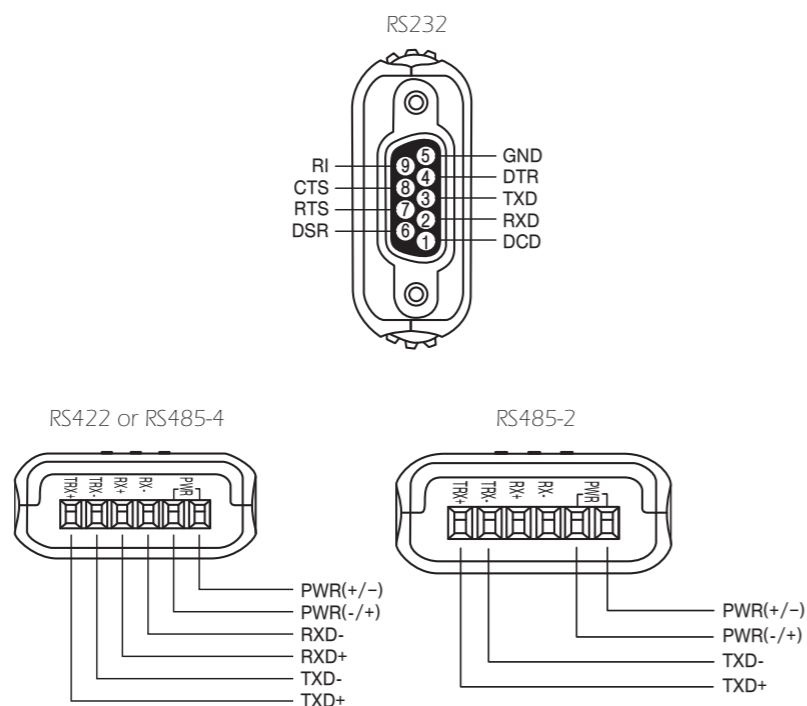
Operating Temp	0 ~ 55°C (32~131°F)
Storage Temp	-20~70°C (-4~158°F)
Humidity	5 ~ 95% Non-Condensing

Ordering Information

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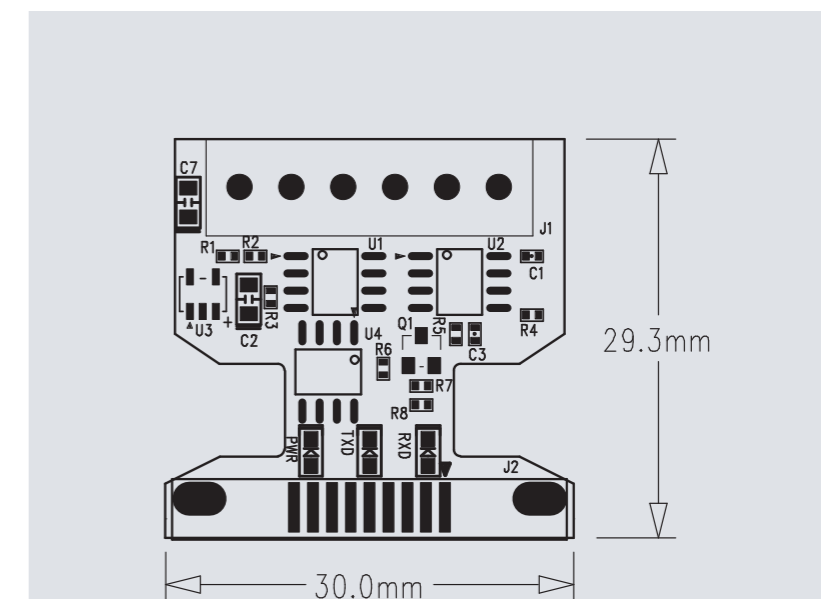
CS-428/9AT-mini	RS232 to RS422/485 Converter with Auto RTS Control (Auto Toggling) DB9 Female Connector for RS232 and Terminal Block for RS422/485 Package Contents : Converter, Manual
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Pin Assignment

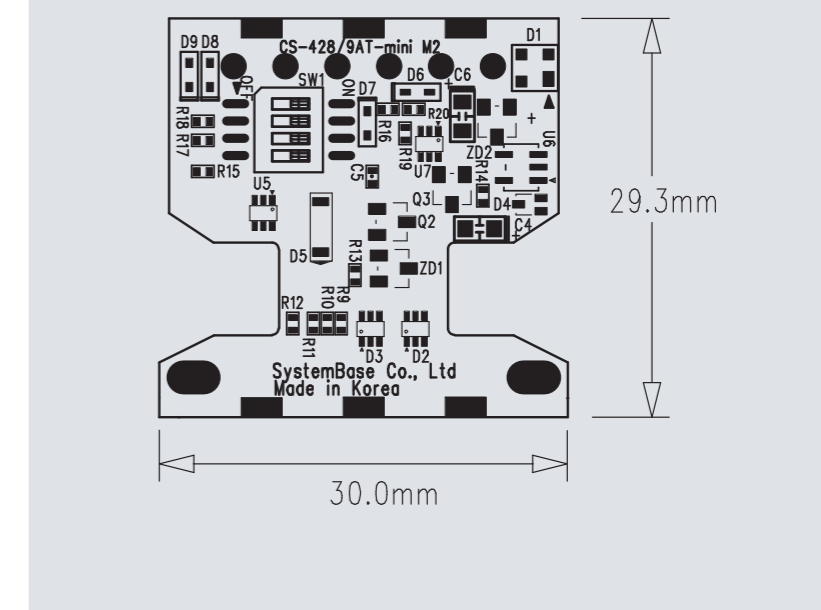


Dimension

Top



Bottom



Sales Inquiry : sales@sysbas.com / Technical Support : tech@sysbas.com