



## DT-9027

### RS232 TO RS485/RS422

## Industrial-grade high-performance and isolation type interface converter instruction

### 1、 Overview

DT-9027 industrial-grade ISO. type interface converter, compatible with the RS - 232 - c, RS - 422, RS - 485 standard, can be an RS - 232 signal is converted to a balanced differential RS - 422 or RS - 485 signal. The built-in optoelectronic isolator, provide 2500 VRMS isolation voltage; With fast transient voltage suppression protector, which can efficiently in real time to protect the RS - 422 / RS - 485 interface. At the same time can effectively restrain the LIGHTNING (20) and ESD, and provide 600 w per line LIGHTNING surge protection of power, and the surge voltage and the various reasons on transient overvoltage, and tiny electrode capacitance to ensure that the RS - 422 / RS - 485 interface of high speed transmission. The RS - 232 interface end by a female DB9 connector of the head and compatible with the RS - 232 - c standard interface is linked together, the RS - 422, RS - 485 through ten terminal for output. Inside the converter with zero delay transmit.

DT-9027 interface converter can provide point to point, point to multi-point communications reliable connection. By way of point to multipoint connection, the RS422 / RS485 converter each side can be allowed to connect 128 RS - 422 or RS - 485 interface device (theoretical), data communication rate from 300 to 115.2 Kbps, with and data flow of the indicator light indicates a fault condition.

### 2、 The performance parameters

- Compatible with RS - 232, RS - 485, TIA/EIA RS - 422 standard
- Automatically send/receive data, without external flow control signal (RTS), the real three wire (TXD, RXD GND) communication system
- Communication rate: 300 BPS - 115.2 Kbps
- Power supply: 9-35 VDC / 350 ma
- can connect 128 RS - 485 or RS - 422 interface equipment
- Communication distance: 5000 m (9600 BPS test the baud rate)
- Power supply and data traffic lights, point of failure can be detected
- Work style: asynchronous half-duplex (RS - 485) or asynchronous full-duplex (RS - 422) and general, don't need to jump line Settings
- ISO. reinforced (2.5 KVrms / 500 VDC isolation voltage insulation), special DC/DC module, RS - 485/422 provides 600 w per line lightning

protection, surge, + / - 15 kv ESD protection and prevent interference

- Electrical interface: DB9 and ten terminals
- Transmission medium: twisted pair or shielded wire
- Shape size: 117 mm \* 80 mm \* 25 mm
- Using the environment: - 40 °C to 85 °C, relative humidity of 5% to 95%
- Applies to all communications used by software, plug and play
- Support DOS/to Linux /WIN10

### 3、 The connector and the signal:

#### RS232C interface signal pin

DB9 Female(PIN)	RS-232C interface signal pin
1	Carrier detect DCD
2	Receive data RXD
3	To send data TXD
4	Data terminal ready DTR
5	Signal ground SG
6	Data is ready DSR
7	Request to send RTS
8	Clear to send CTS
9	Ringing prompt RI

#### RS-485/422output signal and the terminal pin assignment

terminal	output signal	RS422 Full duplex	RS485 Half duplex
1	T/R+	send A+	A+
2	T/R-	send B-	B-
3	RXD+	receive A+	No
4	RXD-	receive B-	No

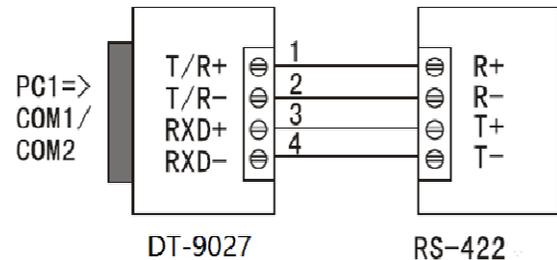
5	N/A	No	No
6	N/A	No	No
7	N/A	No	No
8	N/A	No	No
9	VCC	DC 9-35V power input	
10	GND	ground	

#### 4. Installation and application

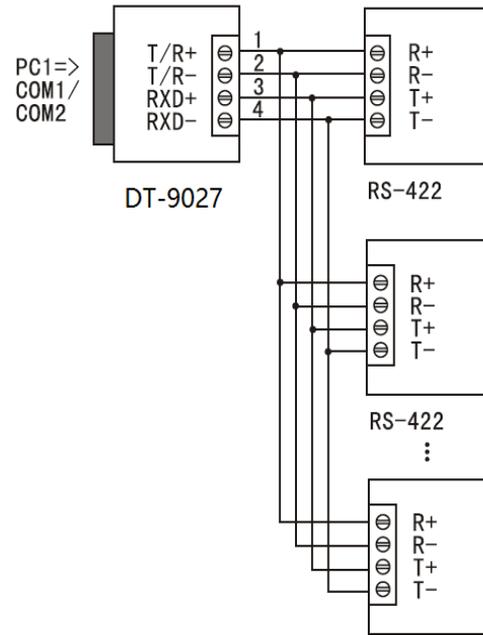
When installing the DT-9027, should first USES the original corresponding DB9 cable into the computer RS232 port and RS232 port of DT-9027, and then USES the customer to purchase the data cable to connect the DT-9027 respectively RS485 RS485 and terminals, terminal after the connection is verified, can turn on the juice. Connect power, VCC "and" GND "corresponding to the positive and the power of the power supply.

The WM - 603 support 4 kinds of communication mode

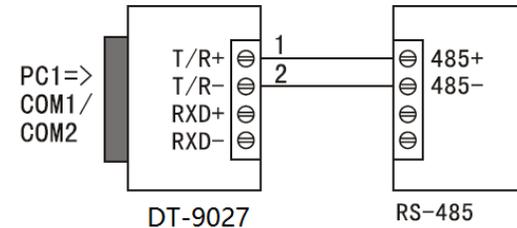
Point-to-point RS422 four-wire full duplex



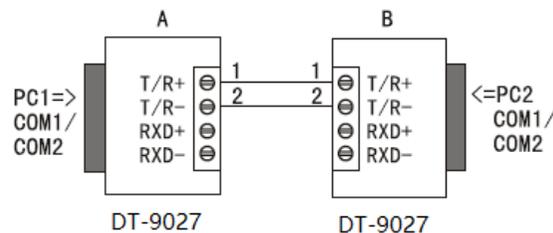
1, point to multi-point RS422 four-wire full duplex



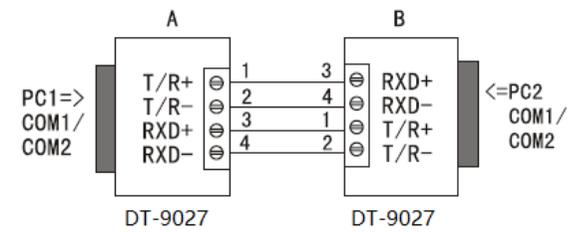
2, the point-to-point RS485 half-duplex two line



3, DT - 9027 full-duplex, and the connection between the half duplex Half duplex connections



#### Full-duplex connection



#### 4, point to multi-point RS485 half-duplex two line

