3onedata®

USB8485I Series

User Manual

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【Summarize】

USB8485I is a kind of USB to 8 port RS485/422 converter, the USB8485I can let PC or work station's USB port connect 8pcs RS-485 or RS-422 comfortable. USB8485I provides four RS-485/422 serial ports, is compliant with USB 1.1 and 2.0 specifications, and meet the 480Mbps high-speed requirement of Hi-Speed USB 2.0. Using your computer's USB ports to connect serial devices reduces the total cost of ownership, investment in hardware, and long term management and integration costs.

【Packing List】

The first time use this product, please check the packaging is intact or not and the attachment is complete or not at first

- USB8485I or USB8485I-P（100/240VAC）x1
- AM type USB to BM type USB cable x1
- 9V/0.5A power adapter x1 or AC power cable x1
- User manual x1
- CD x1
- Certificate x1
- Warranty card x1

If you find that the device is damaged or any parts of it is missing during transportation, please notify the Company or the Company's distributor, we will give you proper solution as soon as possible.

【Features】

- Use USB extend 8 port RS485/422 ports
- CPU occupancy rate very low, high performance
- One RS-485/422 can establish at most 32 nodes
- RS-485/422 side transfer distance 1200m
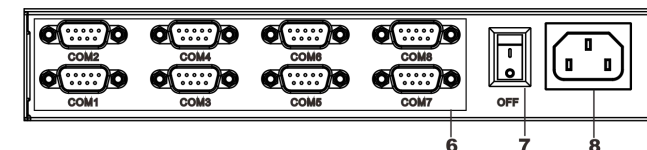- RS485/422 support 2KVAC isolation
- Detect serial speed automatic, Speed: 300～115200bps
- Industrial design, IP30 protection grade
- No fan, low consumption design
- Storage temperature: -40℃～85℃;
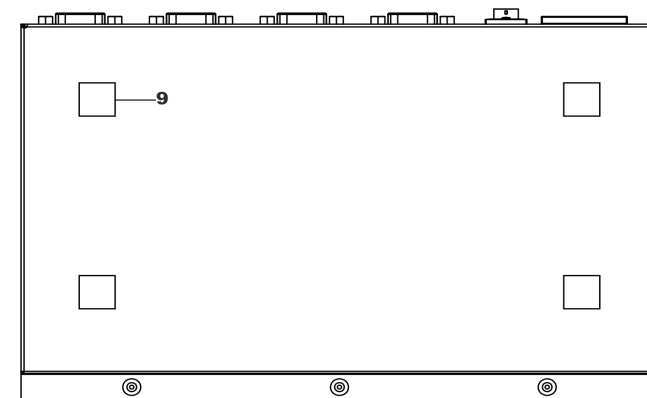- Relative humidity:5%-95%

【Panel design】

USB8485I-P（100/240VAC）：
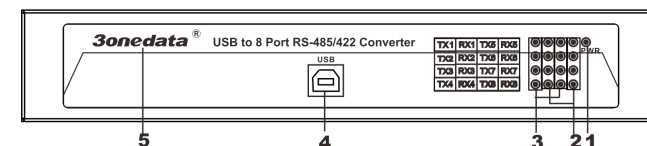
Front view
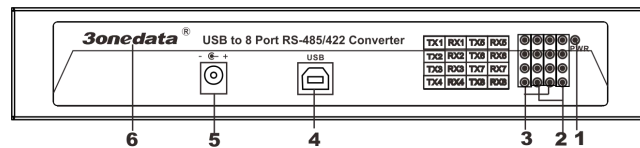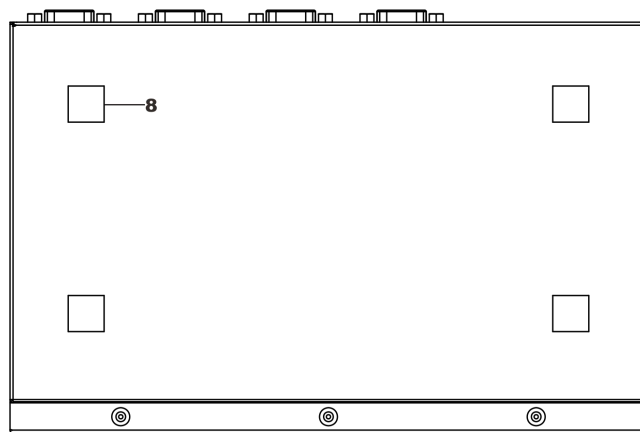

Back view

Bottom view

1.Power LED indicator

2.COM1~COM8 receive data statue indicator

3.COM1~COM8 transmit data statue indicator

4.B type USB female port

5.Company name, product line identification

6.Serial port COM1~COM8

7.Power switch

8.AC power 3-PIN Jack

9.Shim

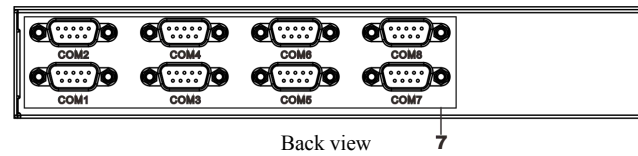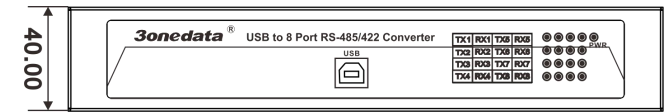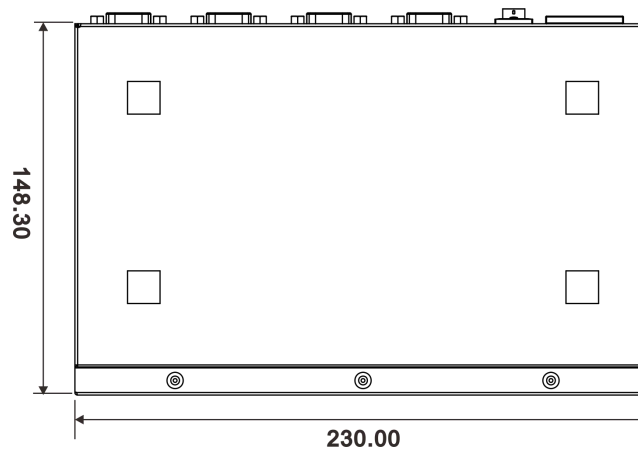## USB8485I：

Front view

Bottom view

Back view 7

1.Power LED indicator

2.COM1~COM8 receive data statue indicator

3.COM1~COM8 transmit data statue indicator

4.B type USB female port

5.DC power input interface

6.Company name, product line identification

7.Serial port COM1~COM8

8.Shim

【Dimensions】
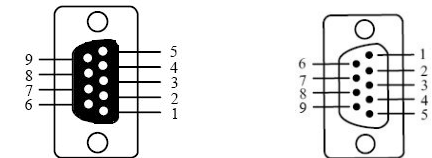
Unit（mm）

USB to 8 Port RS-485/422 Converter

【PIN define】

USB8485I serial converter RS-485/422 side adopts DB9 male, USB port adopts B type USB female, the PIN define is as follows:
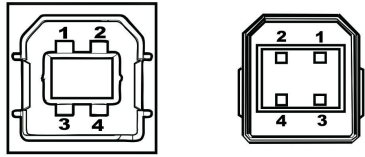
DB9：

DB9F（female, hole）   DB9M（mal, needle）

RS-485 （DB9M）	**1**	D-
	2	D+
	5	GND
RS-422 （DB9M）	1	T-
	2	T+
	3	R+
	4	R-
	5	GND

USB：

USB B type female   USB B type male

B type USB female	1	VCC
	2	D-
	3	D+
	4	GND

【Power input】
USB8485I：
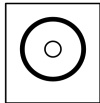
DC

The lower panel of USB8485I provides access port of DC power, wherein the power input is 9VDC. Recommend to use the power adapter of DC head specification with 2.5mm inner diameter and 5.5mm outer diameter, 11cm length.
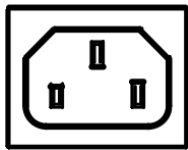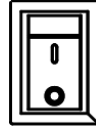
USB8485I -P（100/240VAC）：

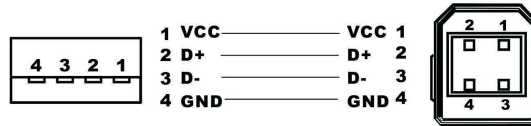USB8485I-P(100/240VAC) back panel provide 220VAC 3-pin power plug, power input range: 100～240VAC.

【Power switch】

USB8485I-P（100/240VAC） back panel provide 1 boat type power switch, if OFF, power is closed, otherwise, it is opened

【USB cable】


Type A USB socket   Type B USB socket

USB8485I provided 1 USB port, it localed in front panel, it can connect to PC with USB cable and make the driver loading and installation

【LED Indicator】
The LED indicator's monitoring working state of USB8485 can fully simplify resolution of fault. Detailed states of each indicator are shown in the following table:

System statues LED		
LED	Statue	Description
PWR	ON	Power connection regular
	OFF	No power connection or unwonted
TX1~TX8	OFF	No data transmitted or unwonted
	ON	Data transmitted unwonted
	Blinking	In receiving data
RX1~RX8	OFF	No data received or unwonted
	ON	Data received unwonted
	Blinking	In receiving data

【Typical application】
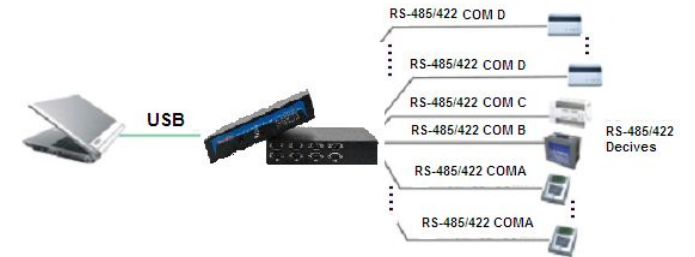
【Specification】

Parameter

Serial port: 8 port RS-485/422

RS-422 signal: T+,T-,R+,R-

RS-485 signal: D+,D-

Parity: None,Even,Odd,Space,Mark

Data: 7bit,8bit

Stop bit: 1bit,2bit

Band rate: 300bps～115200bps

Direction: ADDC, auto detect direction control

Loading: RS-485/422 support 32 nodes

Protection: 2KVAC isolation, grade 4 static protection

Distance: RS-485/422 side: 1200m, USB side less than 5m

Interface

USB port: USB female, type B

RS-485/422 port: DB9 male (attached DB female terminal block)

LED indicator

Power indicator: PWR

8 port RS485/422 COM1~COM8 send data: TX1~TX8

8 port RS485/422 COM1~COM8 receive data: RX1~RX8

Power supply

USB8485I, Power input: 9VDC

USB8485I-P(100-240VAC): 220VAC(100~240VAC)

USB8485I

No-load power consumption:1.63W@9VDC

Full-load power consumption: 2.13W@9VDC

USB485I-P(100/240VAC)

No-load power consumption: 2.3W@220VAC

Full-load power consumption: 4.5W@220VAC

Mechanical:

Shell: IP30, high strength iron shell.

Weight: 1011g

Dimension(L×W×H):230mm×148.3mm×40mm

Environmental

Working temperature: -40～85℃

Storage temperature: -40～85℃

Ambient Relative Humidity:

10 to 95% (non-condensing)

Standard

EMS: EN61000-4-2 (ESD), Level 4

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Warranty:

Warranty time: 5 years

Certification：

CE, FCC, RoHS, UL508(Pending)