

# MDNET網路轉換器模組說明書

**Ethernet to RS-232/RS-485 Converter**  
**Auto-detecting 10/100Mbps Ethernet**  
**Baud rate 4,800-115,200 bps**



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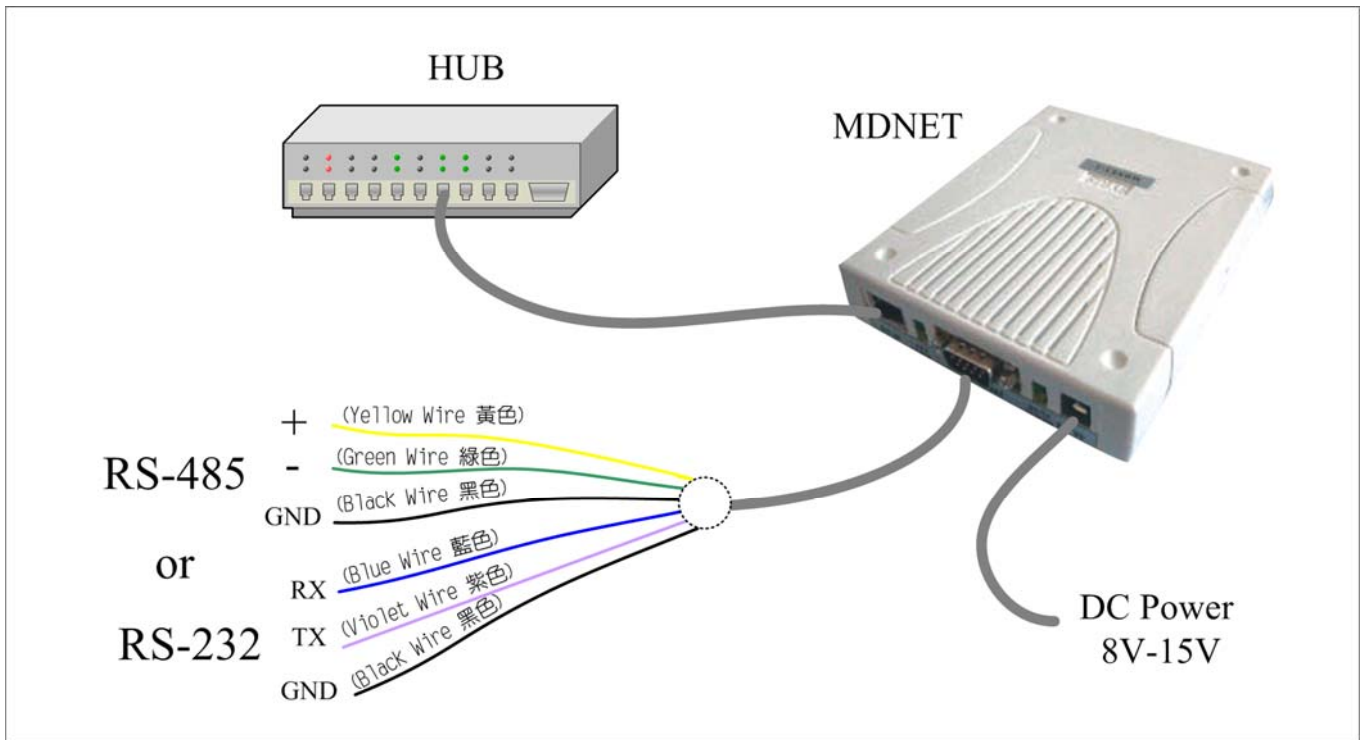
傳真：886-4-2207-9999

電子信箱：service@syris.com

網站：<http://www.syris.com>

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# MDNET WIRING DIAGRAM



## DB9 Connect PIN define

PIN	Function	Note
1		No Connect
2	RS-232 RX	Blue (藍)
3	RS-232 TX	Violet (紫)
4	RS-232 DTR	Orange (橙) No Function
5	GND	Black (黑)
6	RS-232 DSR	Brown (棕) No Function
7	RS-485 +	Yellow (黃)
8	RS-485 -	Green (綠)
9	GND	Black (黑)

## Set to Factory Default (SW1 Hold 5 Second)

IP = 192.168.1.101  
 Gateway = 192.168.1.254  
 Netmask = 255.255.255.0  
 Baud Rate = 19200,E,8,1  
 ID = 0001  
 Start Delay Time = 1500  
 End Delay Time = 500

## MDNET規格:

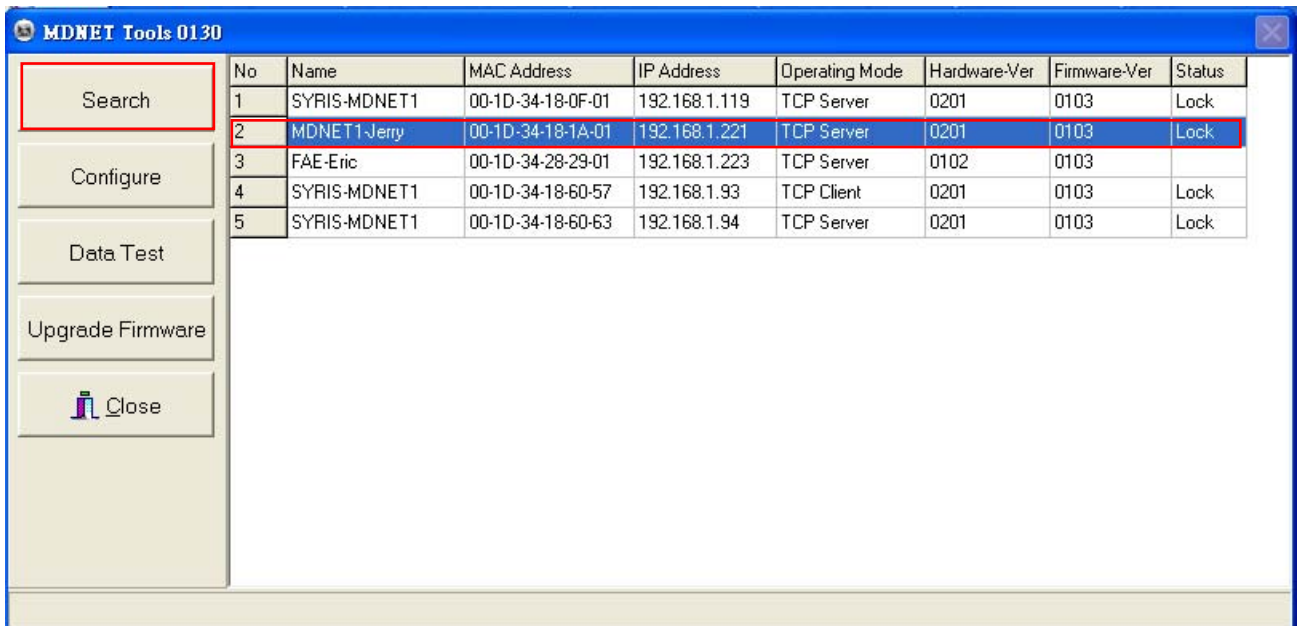
Items / Specs	MDNET-1	MDNET-95A	MDNET-1-A
區域網路	10BASE-T/100BASE-TX port, 10/100Mbps auto-sensing		
TP port	RJ-45 phone jack		
通訊協定	TCP Server/Client, UDP		
通信格式	RS-232 / RS-485 (Auto-detecting)		
連接串口	9 PIN D-SUB (RS-232 / RS-485)		
通信速度	19,200 bps (4,800、9,600、19,200、38,400、57,600、115,200)		
Parity	None, Even, Odd		
Data bits / Stop bits	8 / 1		
配合軟體	None	SYW95A-NET	SYSOFT-95A-260
狀態指示	4 LED (Power, RX/TX, Link, Active)		
顏色	Beige		
工作濕度	10% to 95% (Non-condensing)		
工作溫度	-20°C to 70°C		
儲存溫度	-30°C to 80°C		
Magnetic isolation	1.5KV for Ethernet		
輸入電壓	8V to 15V DC		
網路供電模組	POE 模組(選購配件)		
尺寸(mm)	110W x 136H x 32.5D		

This specification is preliminary and is subject to change without prior notice.

## MDNET 工具使用說明 (繁體中文)

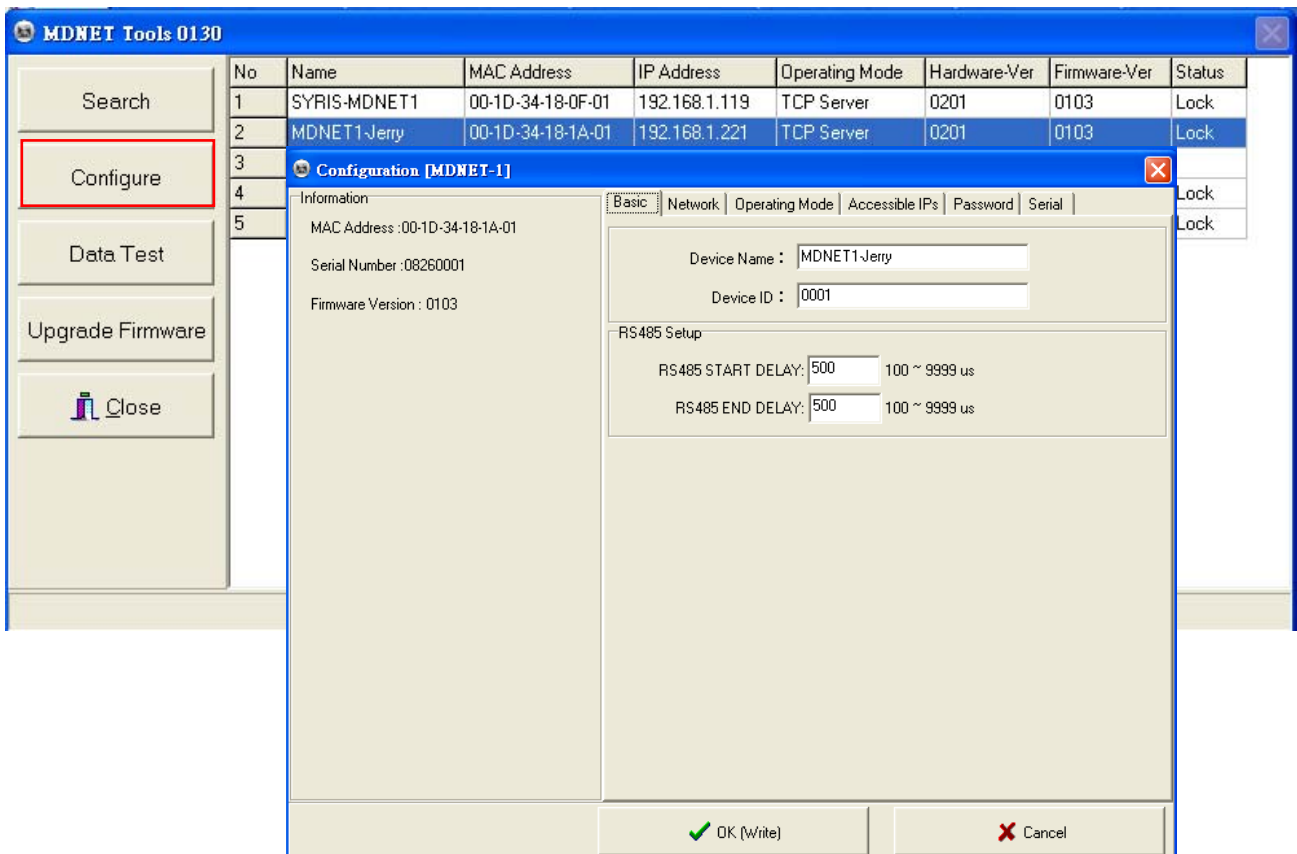
## ■ 連結裝置

開啓MDNET2\_Tools後，點選 **Search** 搜尋裝置資料。



## ■ Configure

雙擊裝置資料行或是點選 **Configure** 進入控制模式。



## ■ Configuration-Basic

1. 於 **Device Name** 欄位輸入裝置名稱。
2. 於 **Device ID** 欄位輸入設定ID。
3. 於 **RS485 START DELAY** 欄位輸入設定延遲時間。
4. 於 **RS485 ENDT DELAY** 欄位輸入設定延遲時間。
5. 確認後點選 **OK(Write)** 寫入。

Configuration [MDNET-1]

Basic | Network | Operating Mode | Accessible IPs | Password | Serial

1. Device Name : MDNET1-Jerry

2. Device ID : 0001

RS485 Setup

3. RS485 START DELAY: 500 100 ~ 9999 us

4. RS485 ENDT DELAY: 500 100 ~ 9999 us

5. ✓ OK (Write)      ✗ Cancel

## ■ Configuration-Network

選擇 **DHCP** 或是設定 IP相關資訊

Configuration [MDNET-1]

Basic | Network | Operating Mode | Accessible IPs | Password | Serial

DHCP

Static IP

IP Address: 192 168 1 221

Netmask Address: 255 255 255 0

Gateway Address: 192 168 1 254

DNS Server1: 0 0 0 0

DNS Server2: 0 0 0 0

✓ OK (Write)      ✗ Cancel

## ■ Configuration-Operating Mode

1. **TCP Server Mode**：設定Local Port，Max Connection可達4。
2. **TCP Client Mode**：可設定Any Character或Star up模式，最多可設定四組IP。
3. **UDP Mod**：設定Local Port，最多可設定四組IP。
4. **Data Packing**：設定段落字元（接收到某特定字元時，將傳出該字元前的訊息）  
Force Tx Timeout：如果遲遲未收到指定段落字元，則在多久時間後送出訊息。
5. **Miscellaneous**：TCP Alive Check Timeout—連線達到設定時間後即斷線；  
Inactivity Timeout—於設定時間內無資料傳輸(UART)即斷線。

**Configuration [MDNET-1]**

Information

MAC Address :00-1D-34-18-30-02

Serial Number :08480002

Firmware Version : 0104

Hardware Version : 0201

Basic | Network | **Operating Mode** | Accessible IPs | Password | Serial

1.  TCP Server Mode  
Local Port: 5001 Max Connection: 1

2.  TCP Client Mode  
Connect Mode: Startup

Destination IP 01: 0 0 0 0 Port: 5001

Destination IP 02: 0 0 0 0 Port: 5001

Destination IP 03: 0 0 0 0 Port: 5001

Destination IP 04: 0 0 0 0 Port: 5001

3.  UDP Mode  
Local Port: 5001

Destination IP 01: 0 0 0 0 Port: 5001

Destination IP 02: 0 0 0 0 Port: 5001

Destination IP 03: 0 0 0 0 Port: 5001

Destination IP 04: 0 0 0 0 Port: 5001

4. Data Packing(Optional)

Delimiter 1 0D (0 - ff,Hex)

Delimiter 2 00 (0 - ff,Hex)

Force Tx Timeout: 0 (0 - 65535 ms)

5. Miscellaneous(Optional)

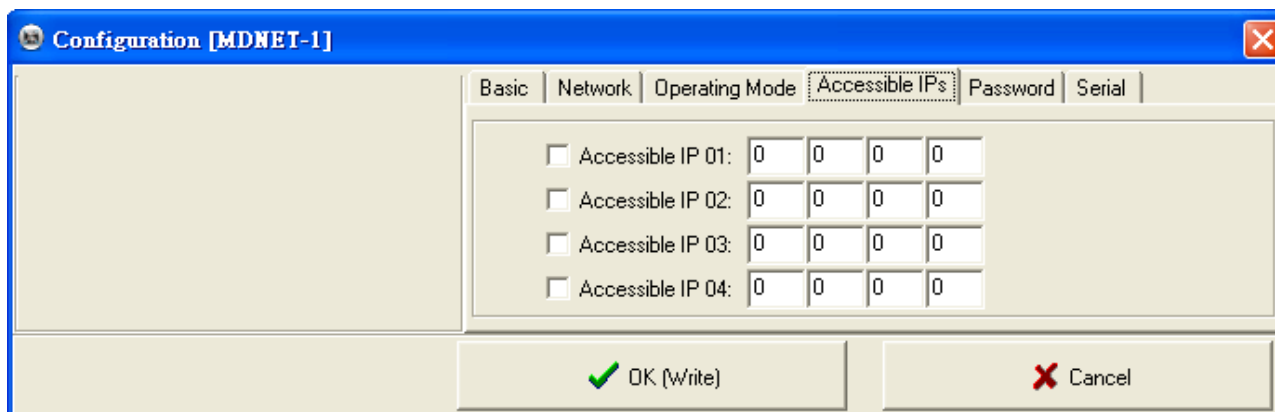
TCP Alive Check Timeout  
0 (0 - 255 min)

Inactivity Timeout  
0 (0 - 65535 ms)

OK (Write) Cancel

## ■ Configuration-Accessible IPs

可設定四組擁有存取權限的IP。

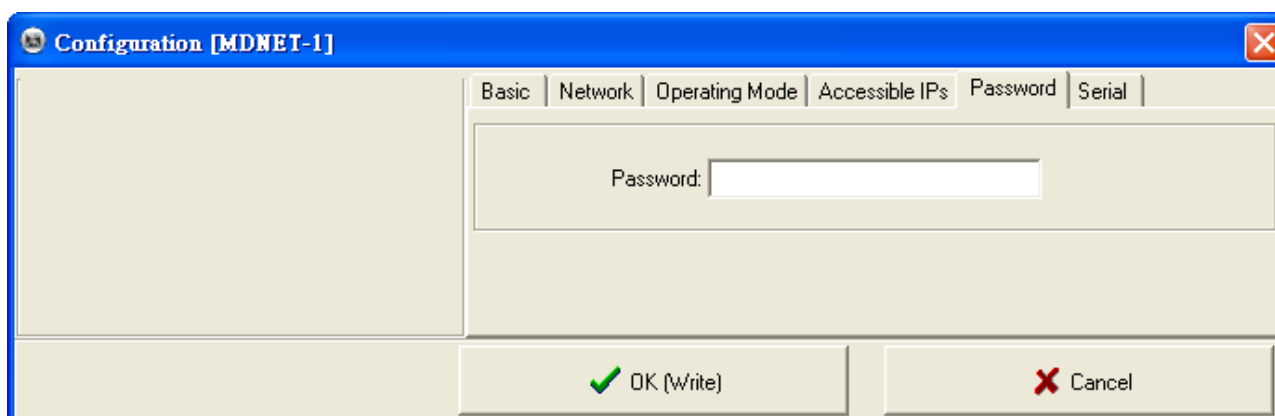


The screenshot shows the 'Configuration [MDNET-1]' dialog box with the 'Accessible IPs' tab selected. The dialog has a title bar with a close button. Below the title bar are tabs for 'Basic', 'Network', 'Operating Mode', 'Accessible IPs', 'Password', and 'Serial'. The 'Accessible IPs' tab contains four rows, each with a checkbox and a 4-digit IP address field. All checkboxes are unchecked and all IP fields contain '0'. At the bottom are 'OK (Write)' and 'Cancel' buttons.

Accessible IP	0	0	0	0
<input type="checkbox"/> Accessible IP 01:	0	0	0	0
<input type="checkbox"/> Accessible IP 02:	0	0	0	0
<input type="checkbox"/> Accessible IP 03:	0	0	0	0
<input type="checkbox"/> Accessible IP 04:	0	0	0	0

## ■ Configuration-Password

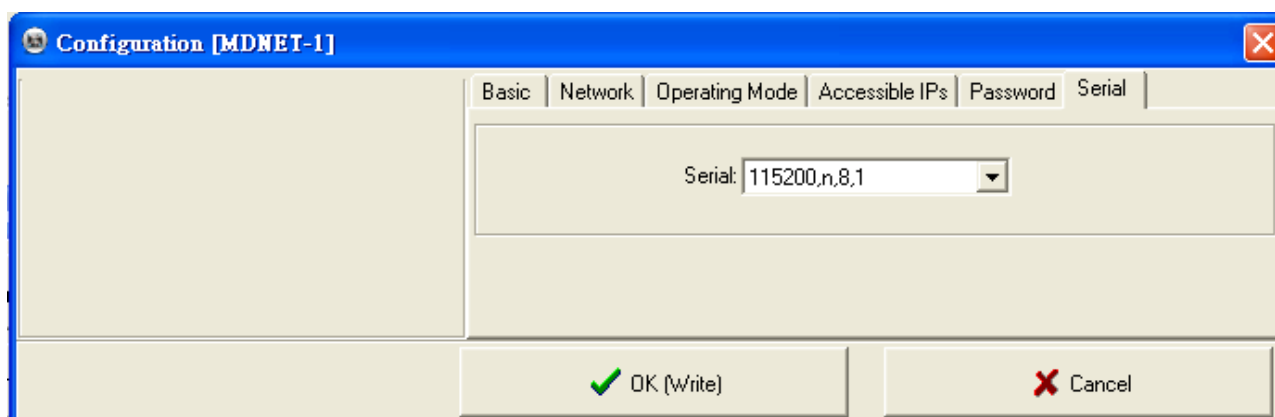
設定進入控制模式時候的密碼。



The screenshot shows the 'Configuration [MDNET-1]' dialog box with the 'Password' tab selected. The dialog has a title bar with a close button. Below the title bar are tabs for 'Basic', 'Network', 'Operating Mode', 'Accessible IPs', 'Password', and 'Serial'. The 'Password' tab contains a 'Password:' label and an empty text input field. At the bottom are 'OK (Write)' and 'Cancel' buttons.

## ■ Configuration-Serial

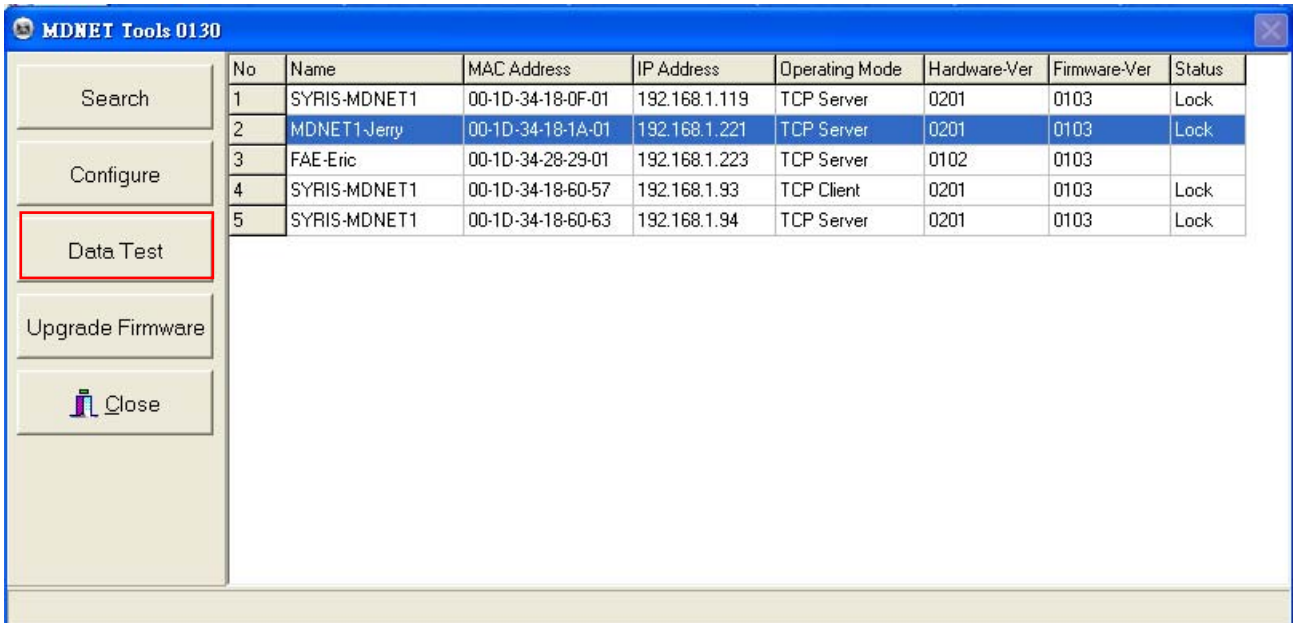
設定速率。



The screenshot shows the 'Configuration [MDNET-1]' dialog box with the 'Serial' tab selected. The dialog has a title bar with a close button. Below the title bar are tabs for 'Basic', 'Network', 'Operating Mode', 'Accessible IPs', 'Password', and 'Serial'. The 'Serial' tab contains a 'Serial:' label and a dropdown menu showing '115200,n,8,1'. At the bottom are 'OK (Write)' and 'Cancel' buttons.

## ■ Data Test

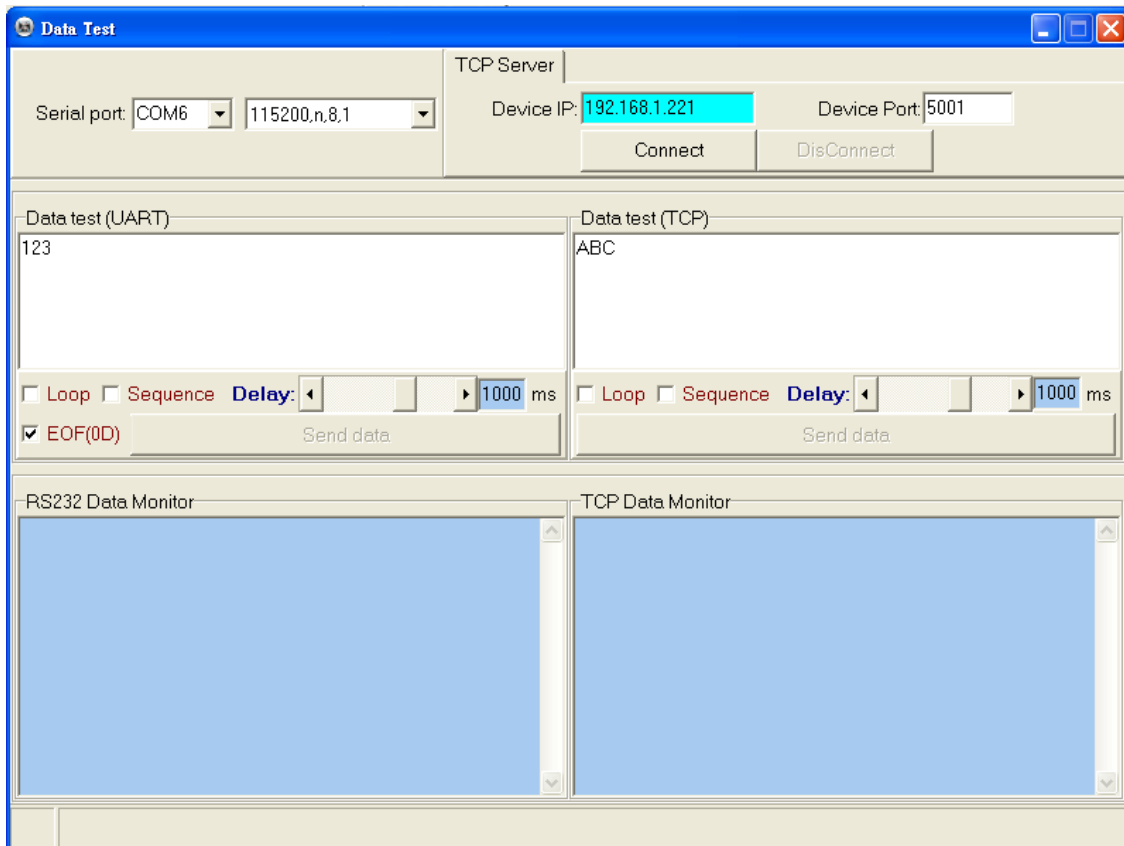
點選 **Data Test** 開啓資料傳輸測試。



設定與欲連線的Port與速率，點選 **Connect** 連線裝置。

點選 **Loop** 可連續傳送訊息，於Delay部分設定時間。

點選 **Sequence** 則會在傳送的訊息前加上序號。



## ■ Upgrade Firmware : 更新韌體

