

## **Real COM mode for ATEN Secure Device Server**

This tech note applies to the following ATEN Secure Device Server models:

Model	Product Name
SN3001	1-Port RS-232 Secure Device Server
SN3001P	1-Port RS-232 Secure Device Server with PoE
SN3002	2-Port RS-232 Secure Device Server
SN3002P	2-Port RS-232 Secure Device Server with PoE

## **Table of Contents**

A.	What is Real COM mode?	. 1
В.	How to configure Real COM mode?	. 2
C.	How to test Real COM mode?	. 6
D.	Appendix	. 7
	ATEN Secure Device Server Pin Assignment	. 7

## A. What is Real COM mode?

Real COM mode is recommended when your host PC uses legacy COM-based software and needs to connect with multiple RS-232 serial devices. This mode treats all SN serial ports as if they were directly connected to the PC and allows data to be transmitted securely over a network.





### B. How to configure Real COM mode?

The following procedures use SN3002P as an example:

- 1. Using a null modem cable, connect the SN's serial port 1 to a serial device (e.g. PC's COM port, sensor, etc.).
- 2. Using an Ethernet cable, connect the SN's LAN port to your local network.
- On a host PC, use IP Installer utility (can be downloaded from SN's product page) to discover the IP address of the SN3002P.



- 4. Using a web browser, enter the SN3002P's IP address, and log in.
- 5. Under *Serial Ports*, click the **EDIT** button of *Port 1*.

										P 👗 💡
	TEN SN3002P									
				Port Name	Operating Mode	Ethernet Port	Baud Rate	Online	In Use	Action
	Serial Ports		 [01]	Port 1	Real COM	5200	9600	Online	No	EDIT DUMP BUFFER
*	Network		 [02]	Port 2	Real COM	5200	9600	Offline	No	EDIT DUMP BUFFER
٥	System	^								
	General Settings									
	Notification									
	Security									
	Update & Restore									
÷	User Accounts	~								
Ē	Logs									
				ATE	N International Co., Ltd	All rights reserved.				



6. Under *PROPERTIES*, configure the necessary serial communication settings (e.g. baud rate, parity, etc.) to match with the connected serial device.

	TEN SN200	20						P 🕹 😧
		Edit					×	Action
-	Serial Ports	PROPERTIE	S OPERATING MODE	PORT BUFFERING				
E.	Network							
ø	System	Port num	iber		1			
	General Settings	Port nam	ie		Port 1			
	Notification	Baud rate	e		9600		•	
	0	Parity			None		•	
	Security	Data bits			8 bits		•	
	Update & Restore	Stop bits			1 bit		•	
-	User Accounts	Flow con	trol		None		•	
ä	Logs							
						SAVE & APPLY ALL SAVE	CANCEL	
				ATEN International	Co., Ltd.All rights reserved	d.		

7. Under *OPERATING MODE*, select **Real COM** from the dropdown list. Optionally enable the **Secure transfer** option if you want the data to be encrypted and transmitted securely over a network.

				P 🕹 🕜
Ē	IEN SN300	Edit		×
		PROPERTIES OPERATING MODE PORT BUFFERING		
æ	Network		[	
ø	System	Mode	Console Management	·
	General Settings		Real COM	- thy
	Notification		TCP Server TCP Client	
	Security		UDP	
	Update & Restore		Serial Tunnel Server Serial Tunnel Client	
÷	User Accounts		Disabled	
ë				
			SAVE & APPLY ALL SAVE CA	ANCEL
		ATEN International Co	o., Ltd.All rights reserved.	

8. On the host PC, install ATEN Virtual COM port driver for Windows or Real TTY / Fixed TTY driver for Linux / Unix (can be downloaded from SN's product page).



9. Run ATEN Virtual COM port driver for Windows and click **Enum Targets** to automatically discover SN3002P within the same network segment.

- 10. If SN3002P cannot be discovered, you can add it manually by entering its IP address, selecting **SN3002** from the *Type* dropdown list, and then clicking **Add Target**.
- 11. Once added, double-click the SN3002 entry to display its serial ports.

Virtual Serial Port Manager Enumeration Operation Help	14 1415, 20,86, 1718, 1828	
Enum Targets Enum Ports Map Unmap		Exit
Target Information	Target Ports COM Ports Working Mode Status	Refresh Mapped COM Ports
IP 10 . 3 . 66 . 129 Socket 5200	PORT1 Real COM Port	COM Ports Mapped From
Name Type SN3002	PORT2 Console	
Add Target Delete Target		
Target Name IP Address Socket Port Target Type		
10.3.66.129 5200 SN3002		

# **ATEN** Tech Note

12. Click **PORT1** to map it with a certain virtual COM port (e.g COM1) of the host PC. Once successfully mapped, you will see COM1 in the list of mapped COM ports.

Virtual Serial Port Manager Enumeration Operation Help	- • ×
Enum Targets Enum Ports Map Unmap	Exit
IP 10 . 3 . 66 . 129 Socket 5200	Refresh Mapped COM Ports COM Ports Mapped From
Name Type SN3002  PORT2 Console	
Add Target Delete Target Mapping Remote Target's Ports to Local PC CO	
Target Name IP Address Socket Port Target Type	
Map consecutively	
OK Cancel	
1	

Virtual Serial Port Manager	
Enumeration Operation Help	
Enum Targets Enum Ports Map Unmap	Exit
Target Information Target Ports COM Ports Working Mode Status	Refresh Mapped COM Ports
IP         IO         IO <thio< th="">         IO         IO         IO<!--</td--><td>COM Ports Mapped From COM1 10.3.66.129 5200 1</td></thio<>	COM Ports Mapped From COM1 10.3.66.129 5200 1
PORT2 Console	
Add larget Delete larget	
Tage wate         IF Address         Socket Polic         Tage type           10.3.66.129         5200         \$N3002	



### C. How to test Real COM mode?

Using PC1 as your host PC, with ATEN Virtual COM driver installed, and PC2's COM port as a serial device, presume the settings of SN3002P and the driver have been properly configured, as mentioned in the previous section.



1. On PC1 and PC2, use Putty, a third-party utility, to configure their serial communication settings, as illustrated below.

Report Configuration	
Session     Logging     Terminal     Keyboard     Bell     Features     Window     Pehaviour     Translation     Selection     Colours     Connection     Data     Proxy     Telnet     Rogin     SSH     SSH     Senal	Basic options for your PuTTY session         Specify the destination you want to connect to         Serial line       Speed         COM1       9600         Connection type:       Raw         Raw       Teinet       Rlogin         Save or delete a stored session       Saved         Saved Sessions       Load       Save         Default Settings       Load       Save         Close window on exit:       Never       Only on clean exit
About	Open Cancel

2. Using the Putty on PC2 (serial device), you can enter any text to test if it can be received by the Putty of PC1 (host), as exemplified below.





## D. Appendix

#### ATEN Secure Device Server Pin Assignment

Pin	Configuration
	RS-232
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS

All information, documentation and specifications contained in this media are subject to change without prior notice by the manufacturer. Please visit our website to find the most up-to-date version.