ATEN *Tech Note*

UDP 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

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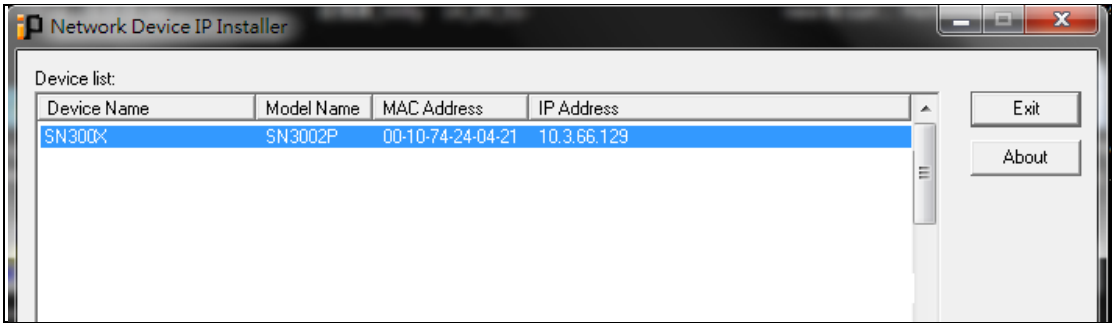
A. What is UDP mode?

UDP mode is a faster, simpler, and more efficient way to unicast or multi-unicast data from a serial device to one or multiple host computers and vice versa. UDP mode does not undergo any error checking nor data encryption and is suitable for message display-related applications.

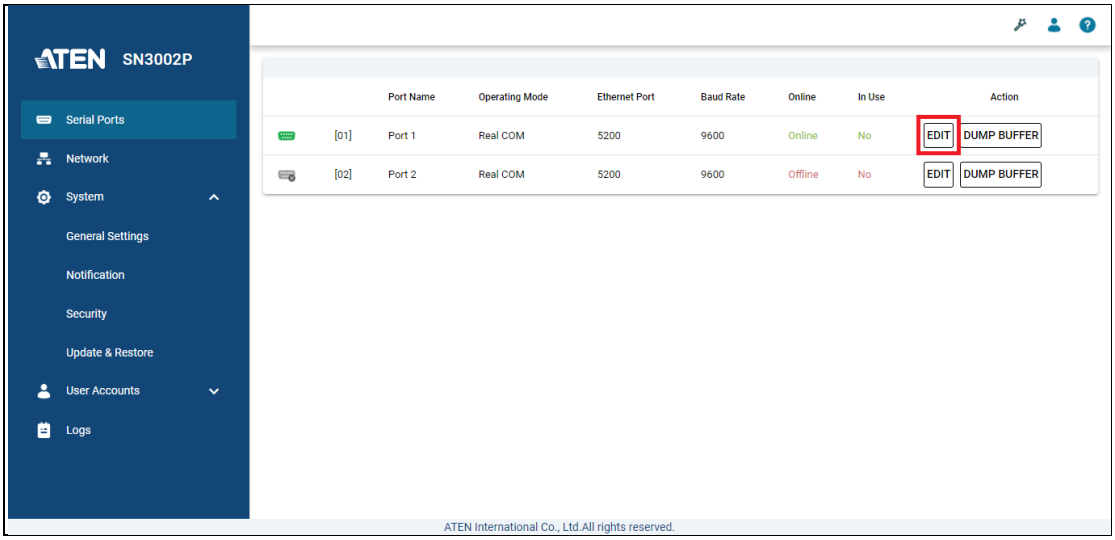
B. How to configure UDP mode?

The following procedures use SN3002P as an example:

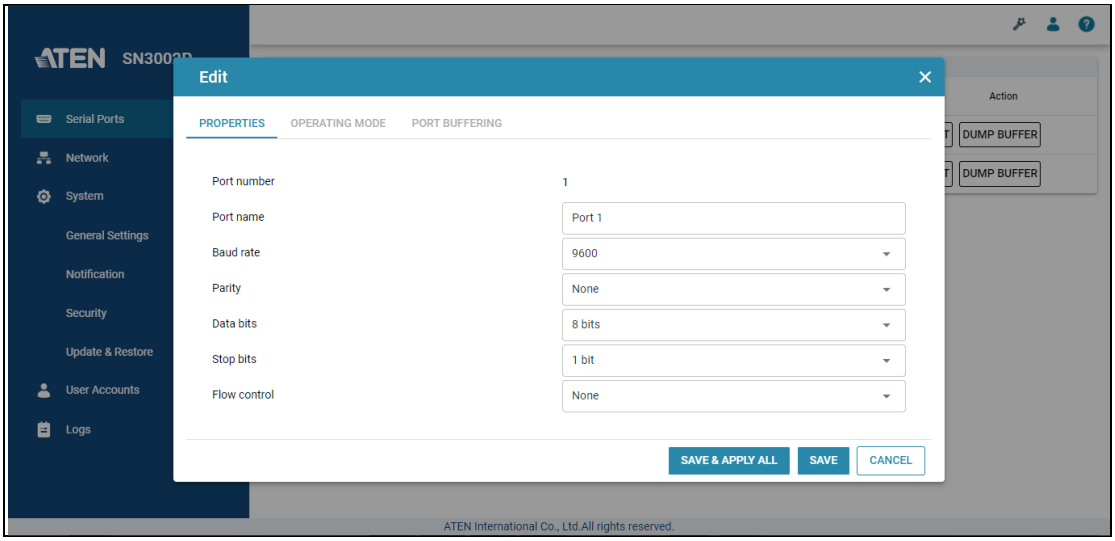
1. Using a null modem cable, connect the SN's serial port 1 to a serial device (e.g. PC's COM port, LED signboard, etc.).
2. Using an Ethernet cable, connect the SN's LAN port to your local network.
3. On a host PC, use IP Installer utility (can be downloaded from SN's product page) to discover the IP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



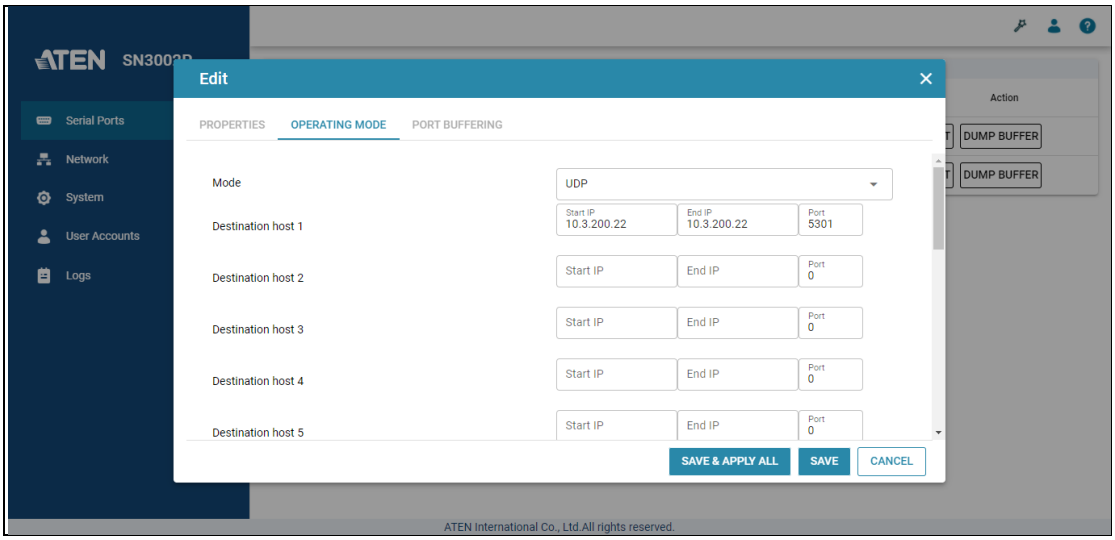
4. Using a web browser, enter the SN3002P's IP address, and log in.
5. Under *Serial Ports*, click the **EDIT** button of *Port 1*.



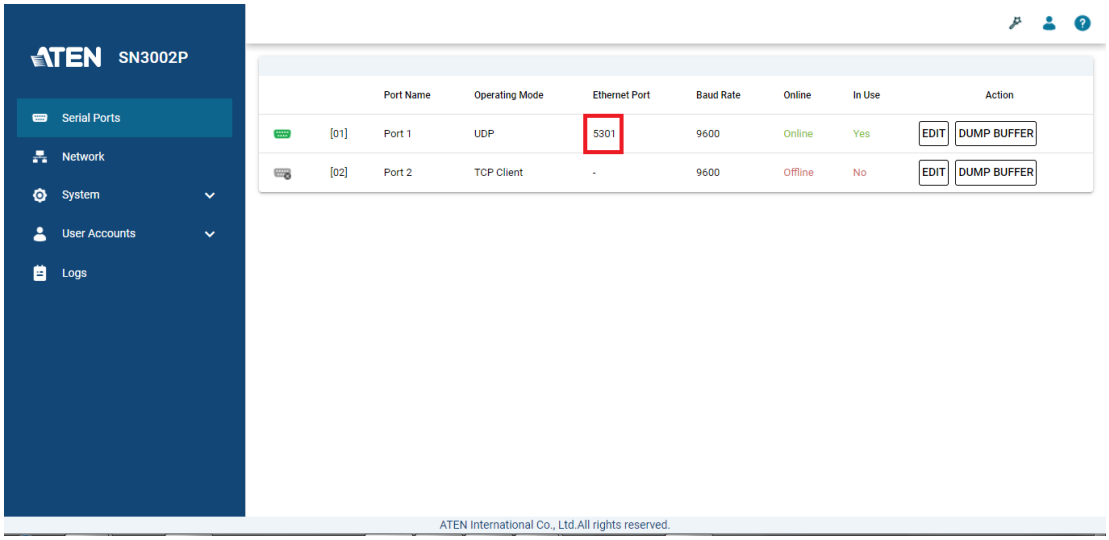
6. Under *PROPERTIES*, configure the necessary serial communication settings (e.g. baud rate, parity, etc.) to match with the connected serial device.



7. Under *OPERATING MODE*, select **UDP** from the dropdown list. Enter the *IP address(es)* of the host computers you want to send or receive data to or from, with a UDP port number of 5301.



8. Once configured, the Ethernet port of SN3002P's port 1 is assigned to 5301, the port number for UDP communication.

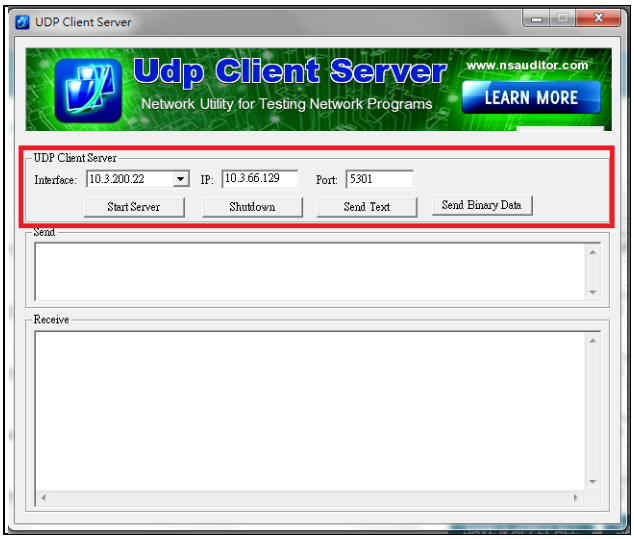


Note: The Ethernet port is assigned based on **base socket** settings in *System > General Settings > Service Ports.*

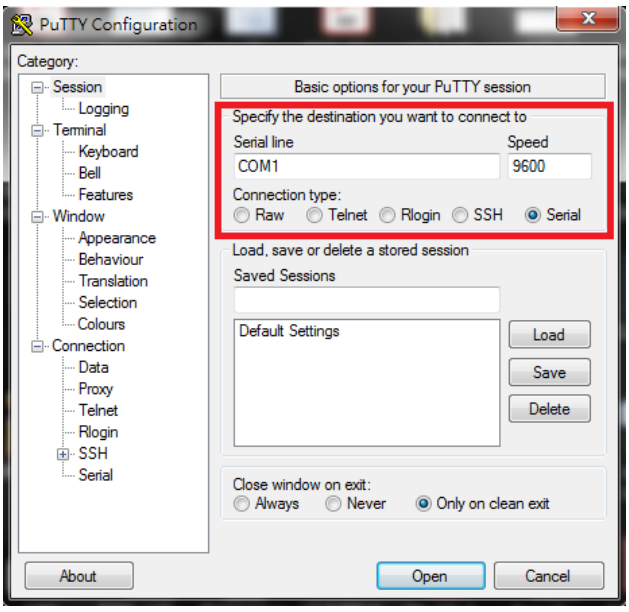
C. How to test UDP mode?

Using PC1 as UDP server / client, and PC2's COM port as a serial device, presume the settings of SN3002P have been properly configured, as mentioned in the previous section.

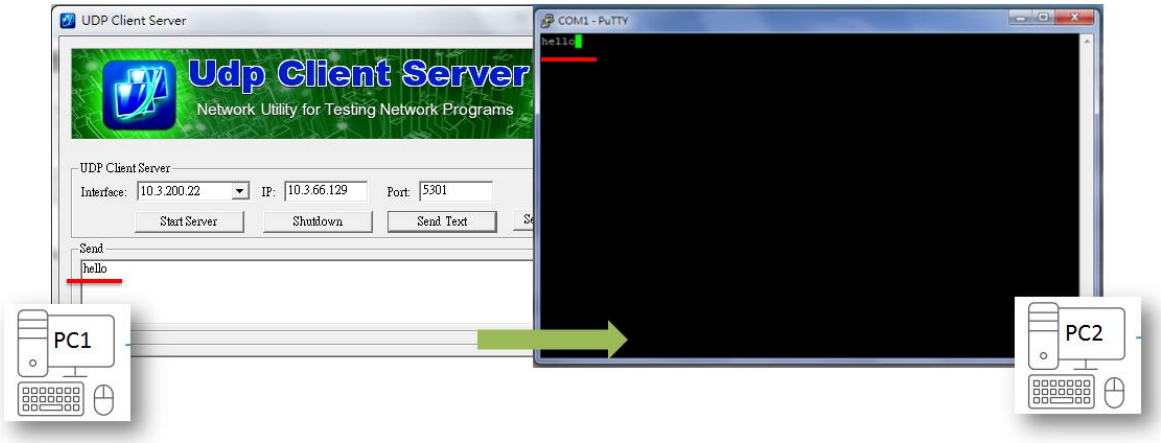
1. On PC1, enter the IP address of SN3002P and port 5301 on UDP Client Server, a third-party utility, to send and/or receive data to and/or from PC2, as illustrated below.



2. On PC2, use Putty, a third-party utility, to configure its serial communication settings, as illustrated below.



3. On the UDP Client Server of PC1, you can enter any text to test if it can be received by the Putty of PC2, as exemplified below.



Note: Conversely, you can also enter any text on the Putty of PC2 to test if it can be received by the UDP Client Server of PC1.

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