

---

## SN3001P

1-Port RS-232 Secure Serial Device Server with PoE



[TEST NOW!](#)

An easy-to-use, secure, and reliable solution makes it easier to connect a wide range of serial devices to an IP-based Ethernet LAN in an instant. The ATEN SN3001P Secure Device Server provides simple, fast serial-to-Ethernet connectivity, allowing your PC to remotely allow users to remotely access serial RS-232 devices from a PC located anywhere. With various reliable features, the SN3001P is ideal for commercial and industrial process control applications.



# Instantly Connect Serial Devices with Secure Access

SN3001P Secure Device Server



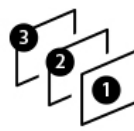
Serial-to-Ethernet



Surge  
Protection



1.5 kV  
Magnetic Isolation



3-step  
Web Console



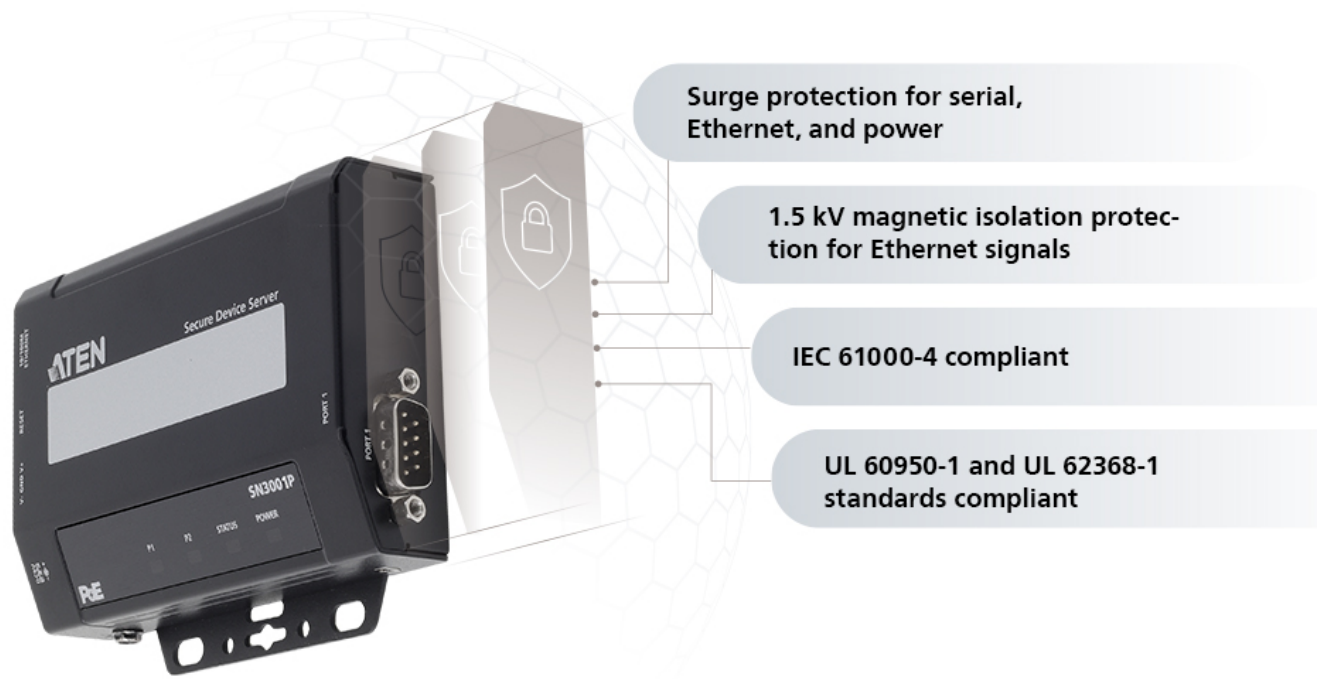
Power  
Redundancy



PoE

## Surge and Isolation Protection Ensure System Stability

Surge protection is a vital aspect of any facility's coordinated electrical protection to ensure safe and reliable operation. To this end, in addition to 1.5kV magnetic isolation protection for Ethernet signals, the SN3001P Secure Device Server features surge protection for serial, Ethernet, and power that prevent an uncontrolled increase in voltage spikes or current. Furthermore, as well as industrial safety standards compliance, they are also tested to meet IEC 61000-4 surge wave form requirements to ensure system stability and reliability.



Surge protection for serial,  
Ethernet, and power

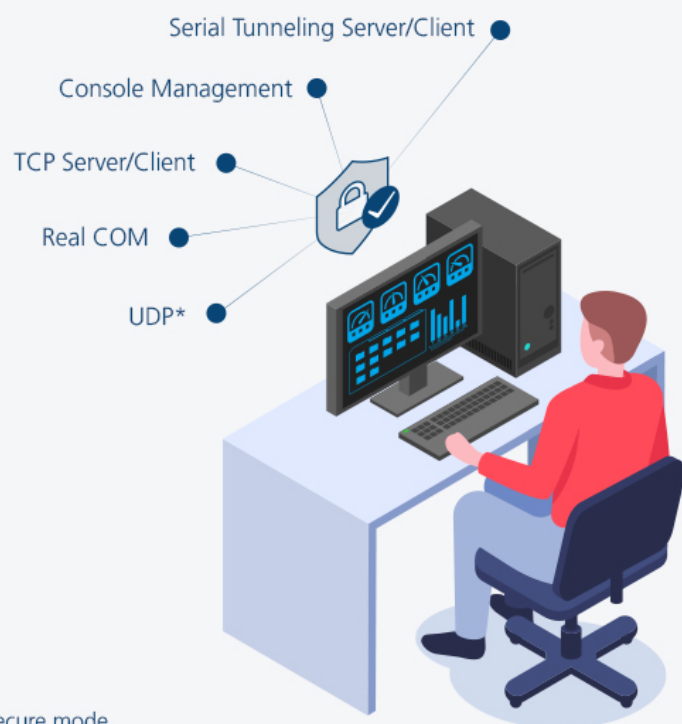
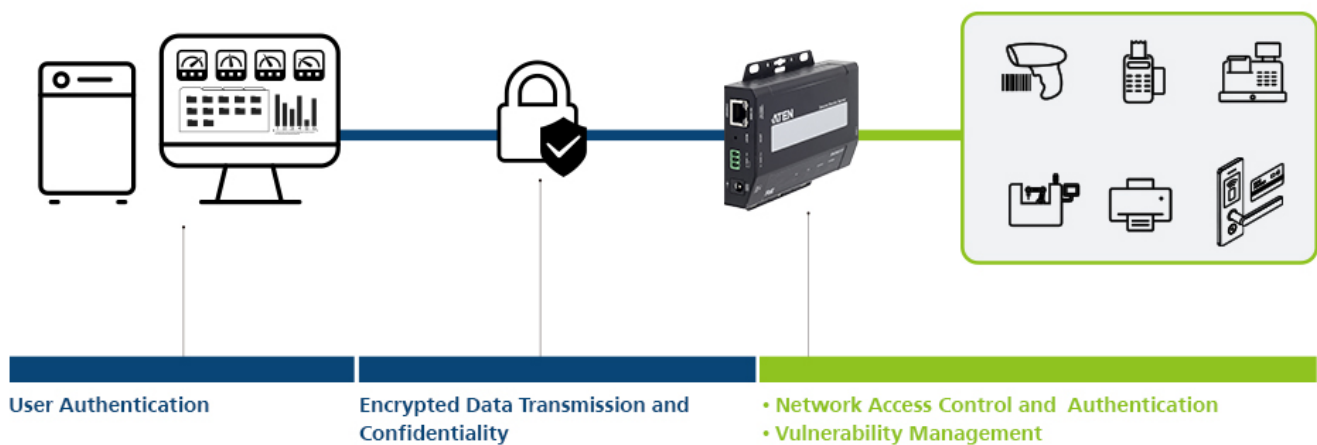
1.5 kV magnetic isolation protec-  
tion for Ethernet signals

IEC 61000-4 compliant

UL 60950-1 and UL 62368-1  
standards compliant

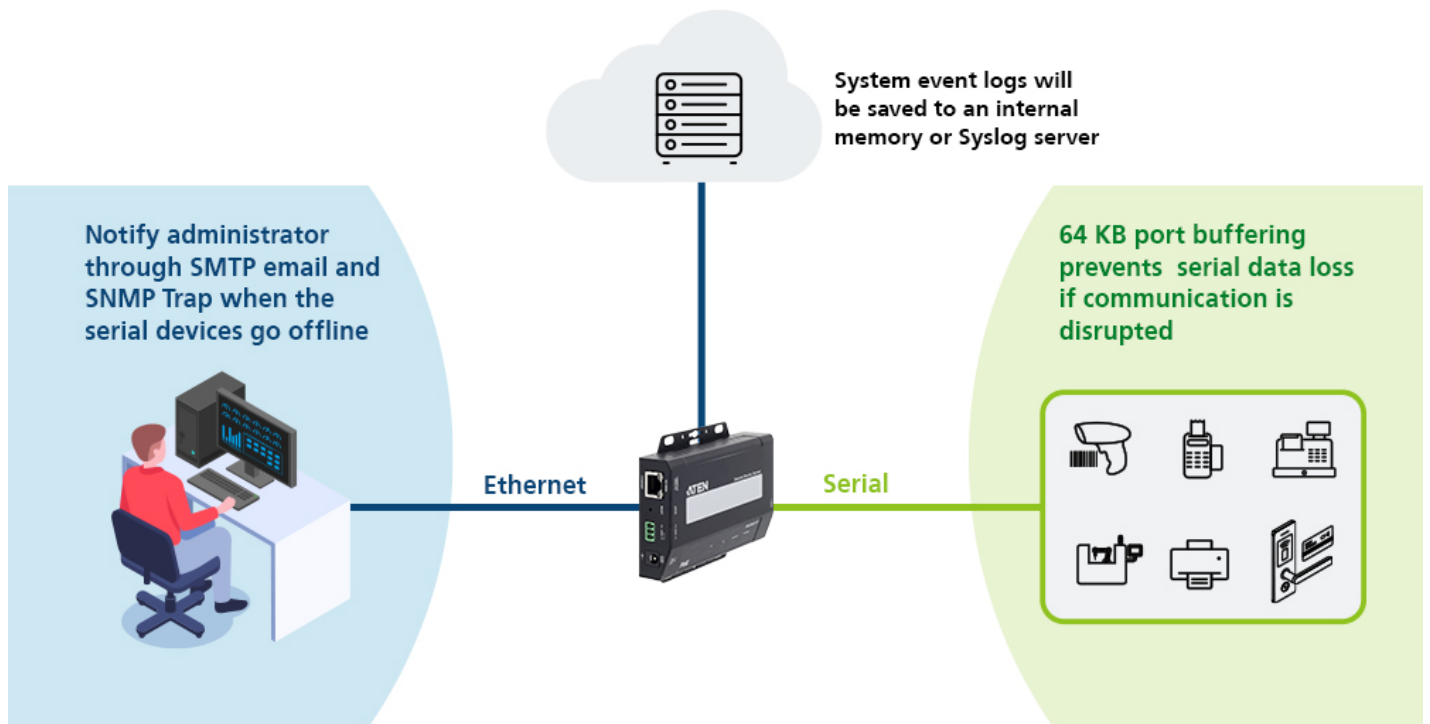
#### Level-up Device Security at Every Stage

The growing numbers of cyber attacks in the industrial IoT era has the potential to bring down systems and cause huge losses of time and money. In order to avoid potential vulnerability risks, enterprises need a multi-layered defense system to ensure secure data transmissions that include regular firmware upgrades, as well as various encrypted forms of authentication and access control. The SN3001P secure serial-to-Ethernet solution is equipped with security functions at every level, including network access control and user authentication, data integrity and confidentiality. Furthermore, with an operation mode available for advanced security functions, you can acquire any field data needed and provide frontline protection.



\*UDP is not offered in secure mode.





#### Target Applications

The SN3001P enables instant networking of serial devices and can be deployed in a variety of commercial applications and industrial process automation environments that require serial-to-Ethernet connectivity. These include POS, access control, SCADA systems, environment monitoring, sensor monitoring, device management, remote site management, and more.



#### Versatile Mounting Options

The SN3001P can be flexibly mounted in various installation environments, so you can easily configure it to your workplace. Mounting options include wall, desktop, DIN rail mounting, or rack mounting (with optional kit [YE-RMK1U](#)) as required



**Product Comparison**

## Features

ATEN SN3000 series Secure Serial Device Servers are external IP-based network devices that securely connect legacy serial RS-232 devices to an Ethernet network to be accessed remotely from a computer located anywhere, allowing you to expand the number of serial ports for any host computer over a network.

The SN3000 series is especially suited for industrial process control applications, given the abundant use of the Supervisory Control and Data Acquisition (SCADA) systems across many industries for collecting data from PLCs, meters, and sensors via serial ports. The SN3000 series bidirectionally translates data between serial and Ethernet formats, and facilitates access to the data from all data collection instruments from local and remote sites through an Ethernet network.

The SN3000 series has a number of useful operation modes. It supports Secure TCP Server / Client, Secure Serial Tunneling Server / Client, Secure Real COM, and console management modes for security-critical applications, such as telecom, access control, and remote site management. Furthermore, its IEEE 802.3afcompliant models can be powered by a PoE PSE device without an additional power supply.

### Serial-to-Ethernet Connectivity

- 1 RS-232 serial port for secured serial data over Ethernet transmission
- Secured operation modes – Secure Real COM, Secure TCP Server / Client, Secure Serial Tunneling Server / Client, Console Management (SSH), and Console Management Direct (SSH)
- Standard operation modes – Real COM, TCP Server / Client, Serial Tunneling Server / Client, UDP, Console Management (Telnet), and Console Management Direct (Telnet)
- Real COM, Real TTY, and Fixed TTY drivers for Windows, Linux, and UNIX
- Convenient console management access via Java viewer (SSH/Telnet) or third-party clients such as PuTTY
- Easy console port access via Java viewer and Sun Solaris ready ("break-safe")
- Multiple users can simultaneously access the same port – up to 16 connections per port

### Hardware

- Redundant power input (power jack and terminal block) for fail-safe power
- IEEE 802.3af-compliant PoE PD (powered device) equipment
- Surge protection for serial, Ethernet, and power
- DIN-rail mounting, wall mounting, rack mounting, and desktop installation available
- Supports baud rates of 110, 134, 150, 300, 600, 1200, 1800, 2400, 4800, 7200, 9600, 19200, 38400, 57600, 115200, 230.4k, 460.8k, 921.6k bps

### Security

- Supports secured login from browsers with TLS 1.2 data encryption and RSA 2048-bit certificates
- Configurable user permissions for port access and control
- Local and remote authentication and login
- Third-party authentication (e.g. RADIUS)
- IP address filter for security protection

### System Management

- Browser access with an intuitive GUI design
- Web-based quick setup wizard for fast configuration
- Terminal-based access with a menu-driven UI via Telnet / SSH
- Online / Offline detection of connected serial devices (including terminal blocks) – automatically sending event notifications when the devices are offline (e.g. power failure) for device status monitoring
- System event logs will be saved to an internal memory or Syslog server
- Port logs will be saved to an internal memory or Syslog server
- SNMP agent (v1/v2c)
- Event notification – supports notification of SMTP email and SNMP Trap (v1/v2c)
- Backup / Restore system configuration and upgradeable firmware
- 64 KB port buffer prevents data loss when the network is down
- NTP for time server synchronization
- Multi-language web-based GUI

## Specification

|            |                                                                           |
|------------|---------------------------------------------------------------------------|
| Connectors |                                                                           |
| Serial     | 1 x DB-9 Male                                                             |
| Network    | 1 x RJ-45 Female                                                          |
| Power      | 1 x DC Jack<br>1 x 3-pole Terminal Block<br>1 x RJ-45 (PoE, IEEE 802.3af) |
| Switches   |                                                                           |
| Reset      | 1 x Semi-recessed Pushbutton                                              |
| LEDs       |                                                                           |
| Power      | 1 (Green)                                                                 |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status                 | 1 (Yellow Green/Red)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 10/100 Mbps            | 2 (Green/Orange)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Ports                  | 1 (Green/Orange)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Input voltage          | DC Jack: 9VDC (optional power adapter)<br>Terminal Block: 9-48 VDC<br>PoE: 48VDC                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power Consumption      | DC48V:0.975W:5BTU/h<br>POE:1.22W:6BTU/h<br><br>Note:<br><ul style="list-style-type: none"> <li>● The measurement in Watts indicates the typical power consumption of the device with no external loading.</li> <li>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.</li> </ul>                                                                                                                                                                                         |
| Interfaces             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Serial                 | RS-232: Tx/D, Rx/D, RTS, CTS, DTR, DSR, DCD, GND<br>Baud Rate: 110, 134, 150, 300, 600, 1200, 1800, 2400, 4800, 7200, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600 bps<br>Data Bits: 5, 6, 7, 8<br>Parity: None, Even, Odd, Space, Mark<br>Stop Bits: 1, 1.5, 2<br>Flow Control: RTS/CTS, DTR/DSR, XON/XOFF                                                                                                                                                                                                |
| Network                | 10/100 Base TX<br>Built-in 1.5 kV Magnetic Isolation Protection                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Compliance             | EMC: EN 55032/35<br>EMI: CISPR 32, FCC Part 15B Class A<br>EMS:<br>IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m<br>IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV<br>IEC 61000-4-5 Surge: Power: 2 kV (Power Adapter), 1kV (Terminal Block); Signal: 1 kV<br>IEC 61000-4-6 CS: 150 kHz to 10 MHz: 3 V/m; 10 kHz to 30 MHz: 3 to 1 V/m; 30 kHz to 80 MHz: 1 V/m<br>IEC 61000-4-8 PFMF<br>IEC 61000-4-11 DIPs<br>Safety: UL 60950-1 and UL 62368-1 standards compliant<br>RoHS |
| Environmental          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating Temperature  | 0 - 60°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Storage Temperature    | -40 - 75°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Humidity               | 5 ~ 95% RH, Non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Physical Properties    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Housing                | Metal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Weight                 | 0.21 kg ( 0.46 lb )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dimensions (L x W x H) | 9.80 x 11.70 x 2.60 cm<br>(3.86 x 4.61 x 1.02 in.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Installation           | Desktop, Wall Mounting, Din-Rail Mounting, Rack Mounting (with VE-RMK1U)                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Others                 | Power consumption DC9V: 0.805W:4BTU<br>Power adapter is sold separately.<br>Rack mounting kit (VE-RMK1U) is sold separately.                                                                                                                                                                                                                                                                                                                                                                                            |
| Note                   | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.                                                                                                                                                                                                                                                                                                                                                                                         |

Diagram

