



## Closed IPTV® Secure Network Extender

Specifically designed to create hardened IP video networks, NetVu's Secure Network Extender possesses features which provide security benefits over and above standard switch products. The Secure Network Extender automatically locks down the endpoint with a unique key, and securely segregates the video data creating an "air gap" between the corporate network and the video surveillance system. A key benefit of the system is that it can be accessed through a single IP address and there are no means of ingress into the corporate network through cameras and endpoints.

Through the Secure Network Extender, cameras are automatically allocated an IP address and assigned to specific network ports, removing the need for any manual intervention and decreasing the cost of ownership. Power for the cameras is provided by the ethernet cable using Power Over Ethernet (PoE+) technology. A front panel rotary switch and OLED display provides unit configuration and status information.

### Trusted Endpoints

Critical to the security of a Closed IPTV® system is the provision of Trusted Endpoints. A Trusted Endpoint has a unique secret signature that is shared with and verified by the Secure Network Extender and DVR.

Even if the Endpoint can be spoofed (the IP address, MAC address etc. copied to another device such as a laptop) the signature cannot be spoofed and rogue interference with the Closed IPTV® network will immediately trigger a security alert. Trusted end point technology is provided by the combination of the Secure Network Extender and NetVu cameras.

### Secure Network Modes

From restricting the communication between end points and locking traffic by MAC address, to removing access to the Corporate network through an exposed end point such as a camera, the Secure Network Extender offers a wide range of secure network modes. These secure network modes are enabled on a Closed IPTV® system according to the requirement of the user, making the system totally secure with just a single click.

### Automatic Assignment of Camera Settings

Using the Secure Network Extender, a Closed IPTV® network can determine the capability of any connected camera and automatically assign appropriate default settings to the camera based on features such as; resolution, telemetry, aspect ratio, lens configuration, alarms and audio.

## Features

- Specifically Designed for Closed IPTV®.
- Deterministic automated IP camera assignment to network port.
- Traffic Management on a port by port basis.
- Creates Trusted Endpoints that protect your IP Video system and Corporate networks from unwanted intrusion.
- Security settings allow a Closed IPTV® system to be tailored to your specific requirements.
- Automatic assignment of cameras to channels on a DVR or Video Server removes the need to manually assign IP addresses, simplifying the setup process and reducing costs.
- Allows installers to deploy a safe, secure IP Video System.
- Transparent Camera Configuration.
- 16 network ports (10/100 BaseT) with PoE+ option.
- 4 cascade or uplink ports with configurable modes.
- Secure Network Extenders can be cascaded together to create a larger system.
- PoE+ (30W) capability enables power to be supplied direct to cameras using standard ethernet cables.
- Two Gigabit SFP ports provide fibre-optic links and user selectable SFP modules, depending on requirements.
- IU 19" rack mountable using the rack mounting ears provided.

# Specification

## Cabling Type

Category 5 Ethernet or higher

## Access Control

MAC-based access control lists

## Display

Link/Activity per port Unit status and diagnostics

## Data Ports

16 x Ethernet Ports for direct connection of IP Cameras (10/100 RJ-45 connections) with optional PoE+ capability.  
 4 x Gigabit Ethernet RJ-45  
 2 x Gigabit fiber-optic SFP Port  
 1 x RS 232 Full Modem Port  
 1 x 6-pin screw terminal for Alarm and Relays

## Power Supply

External 48V DC 250W power supply PoE+ version (included)



Partcode	Description
N2SW/08/OT/P	8 port Secure Network Extender, POE
N2SW/16/OT/P	16 port Secure Network Extender, POE
N2SW/16/OT/HP	16 port Secure Network Extender, POE 250W

## Secure Mode Settings

Apply a range of security features relevant to the Closed IPTV® installation with a single click. Any violation of these settings (such as an unauthorised user attempting to take control of a camera) will automatically create a security alert with the operator.

*Restrict endpoints* - Cameras may be network isolated from each other, preventing any possibility of hijacking a camera cable and using it to gain access to other cameras.

*Restrict General / Corporate Network Access* - Cameras may be network isolated from the general / corporate network, preventing any direct access by unauthorised users.

*Lock by MAC Address* - Locks network ports to specific MAC addresses at an endpoint.

*Trusted Endpoint* - Unique signature verification of the video signal shared between the camera, Secure Network Extender and DVR or Video Server means that if tampered with at all (such as an attempt to duplicate the MAC address of the camera) a security alert is raised.

*Restrict Multicast* - No one network endpoint can gain access to video from any other cameras or endpoints on the network.

*Firewall settings* - Prevents any endpoint from opening a connection to a TCP server on the network and performing malicious activities such as a Denial of Service (DoS) attack.

## Weights and Measures

Dimensions: 45mm (H) x 435mm (W) x 178mm (D)  
 Weight: 2.4kg excluding PSU

## Temperature Range

Temperature Range: 5C to 40C (41°F to 104°F)

## Relative Humidity

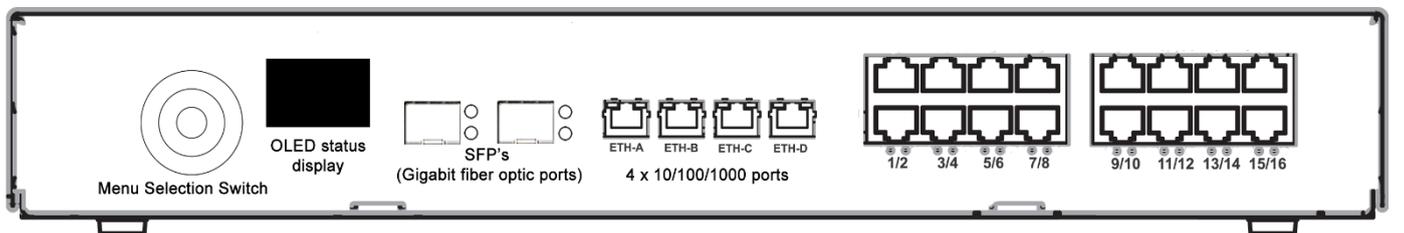
Relative Humidity: 10% to 85% Non-condensing

## Warranty

1 Year

Version 2.0. 24/07/18 © Copyright NetVu Ltd.

Design and specifications are subject to change without notice. E and OE.



**SFP A + B: (Gigabit fibre-optic ports)**  
 Closed IPTV Trunk Connections for interconnecting switches and connecting to DVRs\*

\*Default configuration. Can be programmed for other uses

**ETH A + B:** Closed IPTV Trunk Connections for interconnecting switches and connecting to DVRs\*

**ETH C + D:** Closed IPTV Trunk Connections for additional Secure Network Extenders\*

16 x 10/100 Ethernet Connections for Closed IPTV® Cameras with PoE+ capability\*