# DATASHEET

# **Layer 3 Enhanced CCTV Switch**





A fundamental component in Dedicated Micros award winning Closed IPTV solution – the Layer 3 Enhanced CCTV Switch offers a simple plug and play solution for IP cameras. Specifically designed for IP CCTV networks the switch allows installers to deploy a safe, secure and simple IP CCTV solution.

#### SIMPLE INSTALLATION OF AN IP CCTV NETWORK

The deterministic nature of Closed IPTV means that it is very simple to add and set up cameras to a Closed IPTV system. Through the Layer 3 Enhanced CCTV Switch cameras are automatically allocated IP addressed and assigned to specific network ports removing the need for any manual intervention and rapidly decreasing the time it takes to install and IP CCTV system.

#### TRUSTED ENDPOINTS

Critical to the security of a Closed IPTV system is the implementation of Trusted Endpoints. A Trusted Endpoint has a unique secret signature that is shared and verified with the switch 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 so and rogue interference with the Closed IPTV network will immediately trigger a security alert. \*

#### **SECURE NETWORK MODES**

From restricting the communication between end points and locking traffic by MAC address to removing access to the General/Corporate network via an exposed endpoint such as a camera – the Layer 3 Enhanced CCTV Switch offers a wide range of secure network modes to be enabled on a Closed IPTV system depending on the requirement of the user making the system totally secure with a single click.

#### **AUTOMATIC ASSIGNMENT OF CAMERA SETTINGS**

Using the Layer 3 Enhanced CCTV Switch 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.\*

#### **INCREMENTAL IP GROWTH**

Cascading multiple switches together enables the Closed IPTV system to grow incrementally, all the time retaining its secure capabilities thanks to its unique Closed IPTV technology.

# **FEATURES**

- Specifically designed for IP CCTV networks
- Fundamental part of Dedicated Micros award winning Closed IPTV solution
- Deterministic IP camera assignment to network port
- Traffic management on a port by port basis
- Create Trusted Endpoints that protect your CCTV and Corporate networks from unwanted intrusion
- Security settings allow Closed IPTV system to be tailored to how you want it
- Automatic assignment of cameras to channels on a DVR / Video Server removes the need to manually assign IP ad dresses, simplifying the process and reducing cost

- Allows installers to deploy a safe, secure and simple IP CCTV solution
- Transparent Camera Configuration
- I6 network ports (10/100 BaseT) with PoE option
- 4 cascade / uplink ports (1x Primary Host, 1x Public Port, 2x Configurable )
- Cascade Layer 3 Enhanced CCTV switches together to create a large installed system
- PoE capability enables power to be supplied direct to camera products using standard ethernet cabling





### SPECIFICATION

#### **CLOSED IPTV**

Dedicated Micros' ground breaking Closed IPTV solution makes deploying an IP Video, CCTV system safe, secure and simple. Combining patent-pending innovation with zeroconf networking technology, Closed IPTV automatically allocates IP addresses to IP cameras by physical port. In this way the system is completely deterministic, creating firewalls and monitoring IP connections by individual network ports so they cannot be hacked or intercepted. This ground breaking solution provides a very simple and secure answer to IP Video, meaning that no prior knowledge of IP networking is required. Sophisticated and Dependable network security can be achieved with a single click.

Closed IPTV includes a range of products such as DVRs, NVRs and static and PTZ cameras and 3rd Party Camera Encoders.

#### **CABLING TYPE**

Category 5 Ethernet or higher

#### **ACCESS CONTROL**

MAC-based access control lists (ACLs)

#### **DISPLAY**

Link/Activity per port

#### **DATA PORTS**

16 x Ethernet Ports for direct connection of IP Cameras (10/100 RJ-45 connections)

- 4 x Cascade / Uplink Ports (1000BASE-T RJ-45 connections)
  - I x Host Port for Closed IPTV Cascading
  - I x Corporate / General Network Port
  - 2 x Configurable Ports (private / cascade ports)

#### **POWER SUPPLY**

DM/NSW/CP: External 12V DC power supply (included) DM/NSW/CPP: External 48V DC power supply (included)

#### **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 - Endpoints such as cameras do not have network access to other endpoints

Restrict General / Corporate Network Access - Prevents access to the General network from any endpoint

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

Trusted Endpoint - Unique signature verification of the video signal shared between the camera, switch and DVR/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 DoS Attack

#### **WEIGHTS & MEASURES**

Dimensions: 45mm (H) x 302mm (W) x 146mm (D)

Weight: 1.18 kg excluding PSU

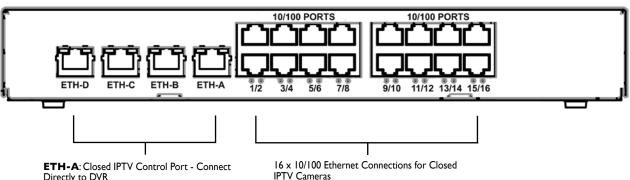
#### **TEMPERATURE RANGE**

Temperature Range: 5 - 40oC

#### **RELATIVE HUMIDITY**

Relative Humidity: 10% - 85% Non-condensing

Partcode	Description
DM/NSW/CP	16 port Layer 3Enhanced CCTV Switch
DM/NSW/CPP	16 port Layer 3Enhanced CCTV Switch, POE



Directly to DVR

ETH-B: General/Corporate Network Port -Access public network (lockable)

ETH-C: Closed IPTV Cascade Port connnects to additional Layer 3 Switches

ETH-D: Zero Conf Network Port - Can be used for administration access and network storage

\*With NetVu Connected Cameras

To find your nearest Dedicated Micros office, please visit

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