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 provides a zero configuration solution for IP cameras allowing 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 addresses 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 addresses, simplifying the process and reducing cost
- Allows installers to deploy a safe, secure and simple IP CCTV solution
- Transparent Camera Configuration
- 16 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
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)
1 x Host Port for Closed IPTV Cascading
1 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 258mm (W) x 146mm (D)
Weight: 1.18 kg excluding PSU

TEMPERATURE RANGE
Temperature Range: 5 – 40°C

RELATIVE HUMIDITY
Relative Humidity: 10% - 85% Non-condensing

WARRANTY
1 Year

<table>
<thead>
<tr>
<th>Partcode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM/NSW/CP</td>
<td>16 port Layer 3Enhanced CCTV Switch</td>
</tr>
<tr>
<td>DM/NSW/CPP</td>
<td>16 port Layer 3Enhanced CCTV Switch, POE</td>
</tr>
</tbody>
</table>

**Partcode**: DM/NSW/CP
**Description**: 16 port Layer 3Enhanced CCTV Switch

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

**Diagram**: 16 x 10/100 Ethernet Connections for Closed IPTV Cameras

**Diagram Notes**:
- **ETH-A**: Closed IPTV Control Port - Connect Directly to DVR
- **ETH-B**: General/Corporate Network Port - Access public network (lockable)
- **ETH-C**: Closed IPTV Cascade Port - connects to additional Layer 3 Switches
- **ETH-D**: Zero_Conf Network Port