

# Cell Switch

## Network Switch Access



### Overview

Cell Switch is a family of cost effective, fully-managed of network Layer 2 Ethernet switch that provides high performance in a compact, efficient size with 1U rack-mounted in height and combines the capacity of physically larger backbone switches with the economy of workgroup switches. This Cell Switch product family is ideal for metro access networks supporting most of Internet applications such as video, VoIP, and data aggregation which require high availability. Cell switch system are technology and robustness proven, with carrier grade operating system that provides a robust platform geared toward satisfying carriers' most stringent requirements for network operations, administration, and management.

Cell Switch provides an optimized network access solution for FTTH/B applications by serving from 8 TX ports up to 24 TX ports 10/100/1000BaseTX with independent Gigabit uplinks up to 4 SFP pluggable optic modules. The uplink allows for maximum flexibility when implementing Ethernet aggregation services, with Multi-mode (MM), Single-mode (SM), and bi-directional (BX) SFP-based transceivers. In addition, Cell Switches support AC or DC power option for carrier network environment.

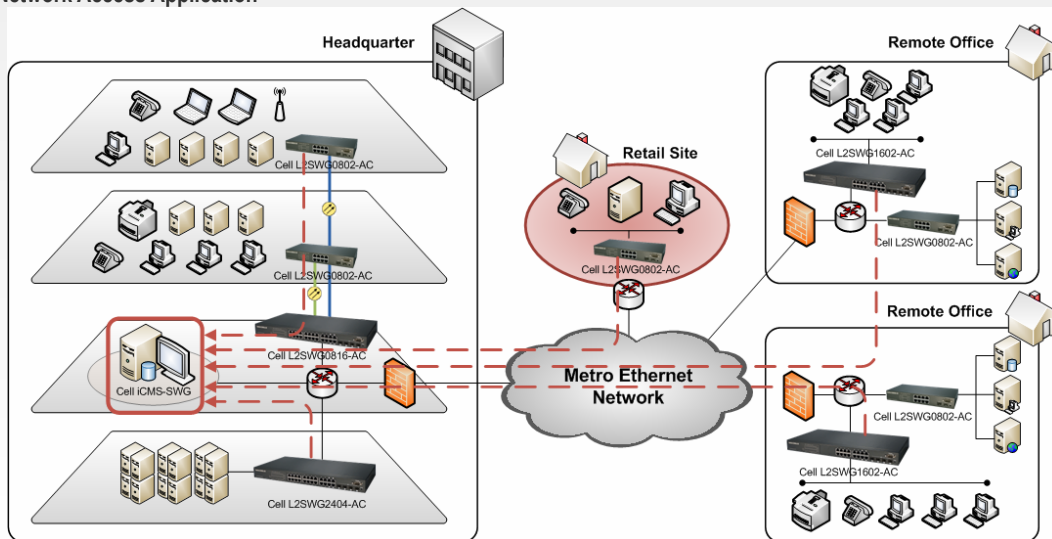
With a large deployment of Cell Switch installed in a multi-national network infrastructure or large enterprise, Cell NetsVision, iCMS-SWG centralized management platform can be deployed manage, centralize, monitor and configure all the switch devices across networks or regions remotely. Cell iCMS-SWG platform provides the network administrator with a powerful, SNMP based configuration, monitoring and maintenance platform. It also supports optical link performance monitoring to avoid any critical link failure.

### Features

- 802.1Q VLAN with Port-based VLAN, Private VLAN. Guest VLAN and Dynamic VLAN supported
- 802.1P QoS by 4 priority Queues for Port-based.
- Large Packet Size (Jumbo Frames) supported.
- Provide Complete Solution Service of IGMP Snooping & MVR, Rate Control, Spanning Tree Protocol, LACP, Storm Control
- Standalone (Web, Cisco liked CLI interface, SNMP, Telnet) or 3-Tier of Centralized Management (Cell NetsVision)
- Optical Link Performance Monitoring
- Technology Proven for Service Providers and Large Enterprises

### Application

#### Cell Switch for Network Access Application



### Hardware Specification

Product Models	Cell SW-0802-AC	Cell SW-0816-AC Cell SW-0816-DC	Cell SW-1604-AC Cell SW-1604-DC	Cell SW-2404-AC Cell SW-2404-DC
<b>Hardware Appliance</b>				
<b>Interface</b>	8 x 10/100/1000 RJ45 TX Ports 2 x SFP GE Ports	8 x 10/100/1000 RJ45 TX Ports 16 x SFP GE Ports	16 x 10/100/1000 RJ45 TX Ports 4x SFP GE Ports	24 x 10/100/1000 RJ45 TX Ports 4 x SFP GE Ports
<b>Network Standard</b>	IEEE 802.3 10 BASE-T IEEE 802.3u 100 BASE IEEE 802.3z IEEE 802.3ab (1000 Base)	IEEE 802.3 10 BASE-T IEEE 802.3u 100 BASE IEEE 802.3z IEEE 802.3ab (1000 Base)	IEEE 802.3 10 BASE-T IEEE 802.3u 100 BASE IEEE 802.3z IEEE 802.3ab (1000 Base)	IEEE 802.3 10 BASE-T IEEE 802.3u 100 BASE IEEE 802.3z IEEE 802.3ab (1000 Base)
<b>MAC Address Table Size</b>	8K	8K	8K	8K
<b>Dimension</b>	250 x 117 x 37 mm	440 x 172 x 43 mm	440 x 172 x 43 mm	440 x 172 x 43 mm
<b>System Console</b>	Serial console port RS232 (DB9)	Serial console port RS232 (DB9)	Serial console port RS232 (DB9)	Serial console port RS232 (DB9)
<b>Power Input</b>	AC 110/220V	AC 110/220V or DC -48V	AC 110/220V or DC -48V	AC 110/220V or DC -48V
<b>Operation Temp</b>	0~ 50 degree	0~ 50 degree	0~ 50 degree	0~ 50 degree
<b>Operation Humidity</b>	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)	10% to 90% (Non-condensing)
<b>Standard Regulatory</b>	FCC, CE	FCC, CE	FCC, CE	FCC, CE

### System Specification

#### Switching Services

- CSMA/CD (Ethernet) access method
- 10/100/1000Mbps communication rate
- Full/Half duplex auto-negotiation
- MDI/MDIX auto-detection (forced mode is supported)
- 802.3x flow control for full duplex, backpressure for half duplex
- 802.1Q VLAN, Port-based VLAN, Private VLAN
- VLAN Stacking
- Multicast VLAN Registration (MVR)
- Guest VLAN and Dynamic VLAN supported
- Store-and-forward switching method
- Spanning tree support RSTP/STP protocol
- Mirror port supported
- 802.1x Authentication and Transparent modes
- Max. 8 trunking groups, Static and LACP supported
- Filtering / Forwarding and Learning bridging function
- Max. 8K address table entries
- Filtering / Forwarding rate line speed
- Max. 9600 bytes packet size supported

#### IP Services

- DHCP Relay supported
- IGMP Snooping - for IP multicast traffic.

#### Traffic Management

- Up to 4 802.1P priority queues per ports for Port-based QoS operation
- tagged-based / DSCP priority operation
- Port Rate Control (128Kbps~1000Mbps) for ingress / egress traffic

#### Management & Diagnostics Tools

- Out-band management console
- In-band management Web GUI, SSL secured, and telnet
- SNMP v1/2c/3 agent, MIB-II, Bridge MIB, 802.1Q MIB and Private MIB supported
- HTTP / TFTP Software Update / Backup, Xmodem, for firmware and configuration (binary / text)
- System Time - by NTP protocol
- Internal system logging
- External syslog logging

#### Security

- Mac ID security on port
- Static Mac address access limit on port, and Dynamic Mac address number limit on port
- IP Filter on Port - IP/Subnet access filter function
- Admin Manage Security, by IP / Subnet / Protocol-interface limit
- DHCP Relay option 82 function
- Broadcast / Multicast / and Unicast Storm Control

#### Cell Switch Centralized Management\*

- Cell iCMS-SWG management for Cell Switch products portfolio
- Java-Based Server-Client platform
- 3-tiered network architecture design
- Cell iPlug-in technology for integration of SNMP or Syslog devices
- Multi-Asian languages supported
- Multi-Platform capabilities supported
- Powerful SNMP based configuration, monitoring, reporting & notification
- SFP diagnostic monitoring supported
- Optical link performance monitoring and management

\* in the product roadmap

### Cell NetsVision, Intelligent Cell Management System (iCMS) Specification

Cell NetsVision, an intelligent Cell Management System (iCMS) is the complete, comprehensive and centralized software management platform to monitor, control and manage for all Cell products including Cell IPS, UTM, CMC, Janus, Switch and NAS in a highly performance and scalability purpose. It is designed with Cell's proprietary technology of iPlug-in integration and 3-tier system architecture design, it supports powerful capability of operating, administrating, provisioning, and maintaining all system logs or events via a feature-rich Graphical User Interface (GUI) operated by a Java-based server and client based software platform under Linux Operation System. Please refer to Cell NetsVision Datasheet for specification and ordering information.

#### About Cell Technology

Cell Technology headquartered at Hong Kong SAR, a network & security technology provider specializes in design, develop and deliver innovative and intelligent IP packet processing platform into software and hardware appliances. Cell product solutions including Cell IPS, UTM, CMC, Janus, TMS, NetsVision and NetsAccess address the business needs that optimize the IP network performance, secure the network security and resiliency, and manage the quality of IP services. For more information, please visit [www.cell-technology.net](http://www.cell-technology.net).  
Cell Switch Datasheet -EN/2010-07 Copyright © 2010 Cell Technology Limited. All rights reserved. Specifications are subject to change without notice.