

EN 60950: 2000, ZB and ZC deviations  
CSA 22.2 No. 950 3rd ed., 1995  
AS/NZS 60950: 2000, Australia;

#### Environmental Requirements

Operating temperature:  
0°C to 45°C (32°F to 113°F)  
Operating humidity:

10% to 90% non-condensing  
Storage temperature:  
-40°C to 70°C (-40°F to 158°F)  
Storage humidity:  
10% to 90% non-condensing

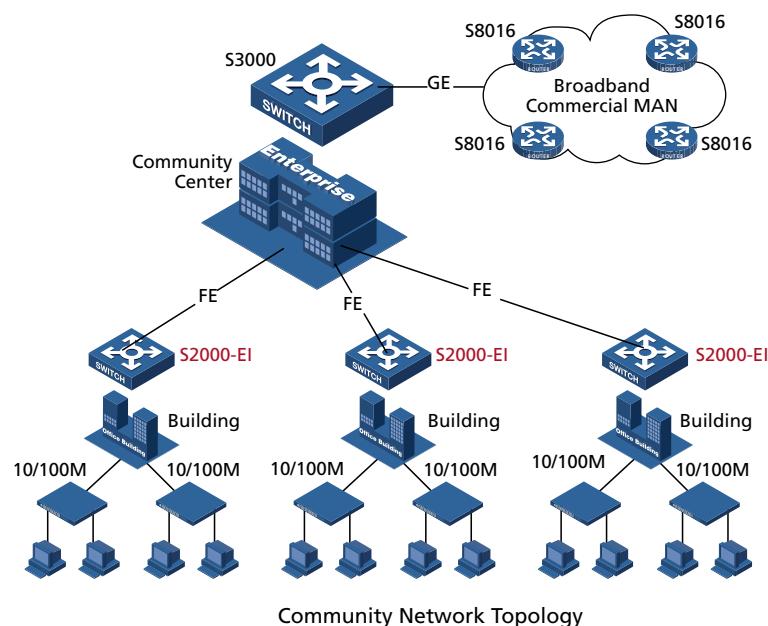
#### MTBF

Switch S2008-EI: 36.56 years (320,265 hours)  
Switch S2016-EI: 35.54 years (311,330 hours)  
Switch S2403H-EI: 35.31 years (309,315 hours)

## Typical Applications

### Application in Intelligent Broadband Community Networks

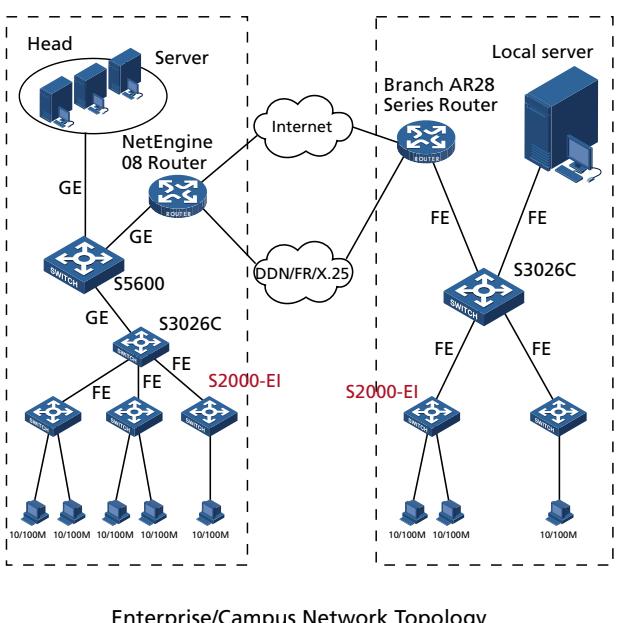
In providing Ethernet access in a broadband community network, the S2000-EI series are placed in doorways of the buildings. They are down-linked to the households and up-linked to the central device, S3000 series for example.



### Application in Enterprise and Campus Networks

For a small-to-medium-sized enterprise or a branch of a large enterprise, the S2000-EI series can serve as L2 convergence switches on its network. They can be down-linked to the users through 100Mbps interfaces and up-linked to the S3000 series and then to the headquarters or the networks of other branches through a router.

In a campus network or the network of a large enterprise, the S2000-EI series work as the desktop switching devices at the access layer; they are up-linked to the switch at the convergence layer (L3 switch) and then to the backbone gigabit switch. Thus, they offer a network-wide scheme that provides GE links to the backbone and FE links to the desktops along with other network devices.



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## DATA SHEET

# Quidway® S2000-EI Series Intelligent Access Switches

HUAWEI 3COM

The Quidway® S2000-EI series intelligent switch are L2 wire-speed Ethernet switches to fully meet the needs for secure

large-capacity switching and high QoS requirements. The system adopts high-performance ASIC and uses a flexible module structure to provide intelligent L2~L7 flow classification, complete QoS, implementing comprehensive service control and subscriber management. It can be used in the style of an access layer switch that focuses on service control & management and network security guarantee in enterprise networks and MANs.

The following models are included in this series switches: S2008-EI, S2016-EI and S2403H-EI, which can be used in the access layer of enterprise networks and MANs. The S2000-EI series switches provide FE uplink interfaces and powerful QoS capabilities to adapt to the access requirements of multiple services.

The S2008-EI provides 8 fixed 10/100BASE-TX auto-sensing ports and one console port. The S2016-EI provides 16 fixed 10/100BASE-TX auto-sensing ports, one console ports, and one expansion slot where an expansion 100BASE-FX module can be installed. This expansion module can be a single mode/multi-mode/medium-haul optical interface module or a 10/100BASE-TX Power over Ethernet (PoE) electrical interface module. Through a 10/100BASE-TX electrical PoE module, a DC-powered S2016-EI can be connected to a remote power supply and becomes a Powered Device (PD).

The S2403H-EI provides 25 fixed 10/100BASE-TX auto-sensing ports, one console port, and one expansion slot where a 100BASE-FX single mode/multi-mode/medium-haul optical interface module using an SC connector can be installed.



Quidway®S2008-EI



Quidway®S2016-EI



Quidway®S2403H-EI

### Abundant QoS policies

The Quidway® S2000-EI series intelligent L2 switch provides two queue dispatching algorithms, which are WRR (Weighted Round Robin), and HQ+WRR (High-Priority Queuing + WRR). It supports Committed Access Rate (CAR) and the traffic granularity is 64Kbit/s.

### Diversified management modes

The Quidway® S2000-EI series intelligent L2 switch can support SNMP v1/v2/v3, OpenView versatile network platform and Quidview® NM system. And it also supports CLI, Web network management, Telnet, HGMP to facilitate the equipment management.

### High reliability

The Quidway® S2000-EI series intelligent L2 switch supports STP/RSTP (Spanning Tree Protocol/Rapid Spanning Tree Protocol). Thus the redundancy back-up and error tolerance capability of the link can be greatly improved to guarantee the network stability.

# Data Sheet

## Specifications

Feature	S2008-EI	S2016-EI	S2403H-EI
<b>Performance</b>			
Switching Capacity	1.6Gbps	3.4Gbps	5.2Gbps
Throughput	1.19Mpps	2.53Mpps	3.87Mpps
<b>Layer 2 Switching</b>			
MAC Address	4K MAC addresses		
Latency	<10µs		
VLAN	512 VLANs (IEEE 802.1Q) GVRP (GARP VLAN Registration Protocol) Port-based VLAN		
Link Aggregation	Up to 4 maximum aggregation groups, each containing up to 8 ports	Up to 8 maximum aggregation groups, each containing up to 8 ports	Up to 12 maximum aggregation groups, each containing up to 8 ports
Traffic Control	IEEE 802.3x full-duplex flow control Back-pressure based flow control (half duplex)		
STP/RSTP/MSTP	IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)		
Multicast	2K Multicast routes IGMP (Internet Group Management Protocol) snooping on Layer 2 interfaces GMRP (GARP Multicast Registration Protocol)		
Network Protocol	DHCP Snooping (Dynamic Host Configuration Protocol Snooping) ARP		
<b>Convergence</b>			
Priority Queues	Four hardware queues per port		
QoS(Quality of Service)	Support flexible queuing algorithms: • WRR (Weighted Round Robin) • HQ+WRR (High-Priority Queuing + WRR) Support bi-directional port rate-limiting with the granularity of 64kbit/s		
<b>Security</b>			
Network Login	Hierarchical user management and password protection Port-based and MAC-based 802.1X authentication Local authentication server PEAP(Protected Extensible Authentication Protocol)/TLS (Transport Layer Security)		
<b>Management</b>			
System Configuration and Management	Support CLI (Command Line Interface) configuration mode Support Configuration via the console port Support Local/remote configuration via Telnet Support System configuration with SNMP v1, 2, and 3 Support RMON (Remote Monitoring) v1 1, 2, 3 and 9 groups of MIB Support Quidview network management system Support Hierarchical alarms Support System log Support HGMP (Huawei Group Management Protocol) v2		
System Maintenance	Debugging information output Ping and Tracert Remote maintenance through Telnet		

## Hardware Configuration

Attribute	S2008-EI	S2016-EI	S2403H-EI
Outline Dimensions (mm) (HxWxD)	40 x 216 x 117	42 x 436 x 200	42 x 436 x240
Weight	<2kg	<=3kg	<=3kg
Input Voltage	AC : 100V~240V, 50/60Hz	AC : 100V~240V, 50/60Hz DC : -40 ~ -60V	
Maximum System Power Consumption	8W	12W	15W
Environment	Working temperature: 0°C~45°C Storage temperature: -40°C ~70°C Relative humidity: 10%~90%, non-condensing		
Fixed ports	(1) 8 10/100M BASE-TX Ethernet ports; (2) 1 console port.	(1) 16 10/100M BASE-TX Ethernet ports; (2) 1 console port.	(1) 25 10/100M BASE-TX Ethernet ports; (2) 1 console port.
Extended Slot	No	(1) 1 extended module slot.	(1) 1 extended module slot.
Extended Module	No	(1) 1*100BASE-FX single mode module (2) 1*100BASE-FX single mode medium-haul module (3) 1*100BASE-FX multi-mode module (4) 1*100BASE-TX PoE electrical interface module	(1) 1*100BASE-FX single mode module (2) 1*100BASE-FX single mode medium-haul module (3) 1*100BASE-FX multi-mode module

## Industry Standards Support

### Ethernet Protocols

IEEE 802.1D (STP)
IEEE 802.1p (CoS)
IEEE 802.1Q (VLANs)
IEEE 802.1s (MSTP)
IEEE 802.1w (RSTP)
IEEE 802.1X (Security)
IEEE 802.3i (10BASE-T)
IEEE 802.3u (Fast Ethernet)
IEEE 802.3x (Flow Control)
IEEE 802.3z (Gigabit Ethernet)

### Administration Protocols

RFC 1812 (IPv4)
RFC 826 (ARP)
RFC 959 (FTP)
RFC 783 (TFTP)
RFC 2474 (Diffserv)
RFC 1058 (RIPv1)
RFC 1723 (RIPv2)
RFC 2138 (Radius Authentication)
RFC 2139 (Radius Accounting)
RFC 2267 (Network Ingress Filtering)

## Safety and Compliance

### Emissions / Agency Approvals

CISPR 22 Class A
FCC Part 15 Class A
EN 55022 Class A
ICES-003 Class A
VCCI Class A
AS/NZS 3548 Class A
EN 61000-3-2
EN 61000-3-3

### Immunity

Product conforms to:
EN 55024: 1998
EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6
EN 61000-4-11

### Safety Agency Certifications

UL 60950 3rd ed.
IEC 60950: 1999, corr. Feb. 2000; all national deviations