



S5 Platform Switch and Control Module (SCM)

The S5 platform SCM is a common module that manages each module's operations and processes traffics to coordinate platform's wide functionality. It has packet switching engine and standard processor that is responsible for data processing and system management respectively. This powerful module also directs communication between multiple S5 platform chassis and communications between S5 platform and other remote products for aggregation or subtending applications. SCM functions include the following: network uplink interface, serial console interface, out-band management interface, redundancy control, system provisioning and software downloading, system resource management and maintenance, bandwidth management and policy enforcement, system alarm collection & reporting, traffic statistics collection & reporting and performance monitoring.

The S5 platform SCM is designed to support the demanding service applications of "Triple Play Service" and service densities associated with fiber access deployment. Through the powerful switch devices and processors, SCM has the capability to deal with virtually all service requirements and network topologies. The intelligent SCM supports redundancy to assure system reliability and service availability and facilitates remote software upgrade capability. New system OS can be downloaded locally or remotely through serial console, out-band management interface or EMS.

The S5 SCM also supports network uplink to provider's core network. By facilitating multiple gigabit Ethernet uplink interfaces with protection mechanism, SCM enhances network reliability and stability. SCM also provides interfaces for management. It has one RS-232 serial console port for local operation and one 10/100Base-TX out-band management port for remote operation. Also the in-band management is supported through ViewlinX EMS or other means such as Web Console or Telnet. All the management information including statistics and alarms is collected and reported through SCM.

The robust SCM fit in dedicated slot. S518 has two slots for SCM and redundant back-up in the center of the shelf, while remaining systems reserves SCM slots on the top of the shelf. S505 and S506 do not support redundancy for SCM.

S5 Platform SCM Key Features¹⁾

Switching throughput of more than 20Gbps (full duplex)

Wire-speed Layer 2 switching and IPv4 forwarding support

4 port Gigabit Ethernet uplink support by SCM

- Uplink redundancy support : L2 LACP/RSTP, L3 ECMP

SCM redundancy support : Full Active-Stand by

VLAN, Stacked VLAN, MAC aging, STP, 802.3x flow control, port mirroring, jumbo frame support

Unicast & Multicasting routing support, Multiple default gateway support

IGMP support with fast join & leave

Ingress policing and egress shaping support

QoS features

- Multi-Field Classification (MFC) support up to Layer 4 headers
- 802.1p CoS, IP ToS, DSCP, IP Precedence base marking & remarking support
- At least 4 queue per slot support
- SP & WFQ support

MAC based filtering support

DHCP server & relay with option 82 support

Web & 802.1x based subscriber authentication and Radius support

Flow & Port based statistics support

In-bound & Out-bound management interface support

RS-232 based serial console support for local CLI

Authentication for administrative login support

ViewlinX EMS support

Fully front access capabilities

Temperature range: Commercial Version (0°C ~ 50°C) in default, optional Temperature Hardened version is in plan

Ordering Information

- S5-SCM-20G : 20Gbps L3 SCM with 4 port 1000BaseFX/SFP & RJ45 gigabit Ethernet COMBO uplink

1) The availability of functional specifications may differ on SCM selected. For detail specifications, please contact CORECESS sales representatives.