SURPASS hiT 7060 / 7060 HC
Multi-Service Provisioning Platform

Nokia Siemens Networks

Highlights at a glance

The SURPASS hiT 70xx series is the new Nokia Siemens Networks Multi-Service Provisioning Platform (MSPP), enabling true multi-service provisioning and serving the requirements of emerging converged networks.

The SURPASS hiT 7060 and SURPASS hiT 7060 HC support a large variety of data interfaces including 10/100M FE/FX, GE, as well as industry-standard PDH/SDH interfaces. In addition, the system supports Layer 2 switching and RPR, providing highly reliable and efficient data transport.

Your customers
get customized bandwidth on demand and tailored service level agreements, and benefit from fast and flexible provisioning or upgrading of bandwidth and services.

Your business
can now cover new market segments (data as well as voice), profit from new applications and services such as bandwidth on demand, realize flexible enterprise Virtual Private Networks (VPNs), and benefit from customized service level agreements.

Your network
is enhanced, gaining in functionality due to the convergence of voice and data. It makes optimal use of available bandwidth capacity and is much simpler to operate. As less equipment is needed, you save investment and operational costs.

SURPASS hiT 7060 / 7060 HC key features

- Non-blocking 70G@VC-4 and 5G@VC-12 embedded within a single fabric
- 25G@VC-4 and 10G@VC-12 embedded together with one STM-16/STM-4 port interface on single fabric
- Multi-service platform: 2M, 34/45M, 155M, STM-1/4/16, (STM-64 for SURPASS hiT 7060 HC), 10/100BT, GbE
- GFP mapping and support of virtual concatenation for optimal scalability of Ethernet services
- Layer 2 switching and aggregation
- Resilient Packet Ring for efficient data transport and aggregation in ring topologies
- Extensive protection mechanisms (SNCP, MSP, 2F-MS-SPRing, hardware)
- Data traffic protection scheme via RSTP
- Hitless bandwidth adjustment via LCAS
- Suitable for 19-inch and ETSI racks

Major benefits for carriers
- Significant OPEX and CAPEX reductions
- Seamless integration into existing network infrastructure
- Fully integrated into Nokia Siemens Networks' best-in-class network management system (TNMS)

Significant reductions in operational and investment costs
The SURPASS hiT 7060 and 7060 HC support both TDM and Ethernet, thus providing carriers with an extremely cost-efficient platform for multi-service support.

The integrated Layer 2 and/or RPR switch module provides switching and overbooking capability, leading to better utilization of the available network bandwidth.

The small form factor pluggable (SFP) optical modules are customized port features which allow "under-equipping" of interface cards to support different applications cost-effectively. Long-haul and short-haul interfaces can be mixed on one card.

Equipment modularity and flexibility is based on a common pool of interface cards with the SURPASS hiT 70xx series. This reduces the number of spare parts operators need to stock.

Seamless integration into existing network infrastructure
The SURPASS hiT 7060 and 7060 HC fit into existing SDH networks and protect the operator's network and resources investment. Full inter-working with other ITU-T standards-based SDH products is warranted.

Full integration into Nokia Siemens Networks TNMS
The SURPASS hiT 7060 and 7060 HC are fully integrated into the Siemens TNMS network management system that provides end-to-end administration and performance monitoring for the complete next generation SDH network. TNMS improves operating efficiency, reduces costs for service delivery and simplifies network operations.

Technological advantages
Considering the evolution of data-based services, next generation transmission networks must be prepared for high-bandwidth traffic growth and unpredictable connectivity demand. The SURPASS hiT 7060 and 7060 HC can be deployed as a terminal multiplexer (TMX), an add-drop multiplexer (ADMX), a local cross-connect (LXC) or a multi-ring terminal (MRT) in point-to-point, chain and ring topologies and ring interconnections to address flexible network requirements.

The SURPASS hiT 7060/7060 HC offer
- Flexible and scalable point-to-point links through use of GFP and LCAS
- Point-to-multipoint and multipoint-to multipoint connections and aggregation via an integrated Layer 2 switch to build VLANs
- Layer 2 multicast support via IGMP snooping
- RPR for data aggregation in the metro area, where ring topologies dominate

- Extended Reach Ethernet interfaces to bridge higher distances on copper.

Designed with the future in mind
The SURPASS hiT 7060 and 7060 HC have been designed to address the emerging convergence networks. Combining the best of both worlds, they are the optimum solutions for all types of mixed TDM and data traffic.

Key Abbreviations
GFP	Generic Framing Procedure
HC	High Capacity
IGPM	Internet Group Management Protocol
LCAS	Link Capacity Adjustment Scheme
MSP	Multiplex Section Protection
MS-SPRing	Multi-Section Protection Ring
RPR	Resilient Packet Ring
RSTP	Rapid Spanning Tree Protocol
SLA	Service Level Agreement
SNCP	Sub-Network Connection Protection

The SURPASS hiT 7060 and 7060 HC help carriers significantly cut costs, increase revenue through more efficient and new service delivery, and quickly adapt to customers' demands. This makes them a key investment for profitable and future-proof metropolitan networks.

Metro Core

Metro WDM

SURPASS
hiT 7080 / hiT 7070 /
hiT 7060 / hiT 7060 HC

Metro Access

SURPASS
hiT 7060 / hiT 7050 /
hiT 7035 / hiT 7030 /
hiT 7025

NGN Switching

TNMS

POTS, ISDN, xDSL

Mobile Network

Company Site A

Company Site B

Customer Premises

SURPASS
hiT 7030 / hiT 7025
hiT 7020

**Access Feeder
Network Termination**

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