

# SURPASS hiT 7050

## 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 7050 is a highly versatile piece of equipment in terms of its applications and equipping options. While offering two different chassis versions that cover the complete range from an STM-1 to an STM-16 system, full-blown ADM-4 or compact ADM-16 applications will form the prime usage. The SURPASS hiT 7050 can support a large variety of data interfaces including Ethernet as well as industry-standard PDH/SDH interfaces. The system also supports Ethernet Layer 2 switching functionality, providing reliable and efficient data transport.

#### Your customers

get customized bandwidth and tailored service level agreements, and benefit from a fast and flexible bandwidth upgrade.

#### Your business

can address new market opportunities, offer highest quality Virtual Private Networks (VPNs) to enterprise customers, and benefit from an ever-increasing need for data communication services.

#### 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.

#### SURPASS hiT 7050 key features

- Non-blocking 5G or 10G@VC-12 switching granularity
- Multi-service platform: 2M, 34/45M, 155M, STM-1/4/16, 10/100BT, GbE
- GFP (Generic Framing Procedure), LCAS (Link Capacity Adjustment Scheme) and VCAT (Virtual Concatenation)
- Layer 2 switching and aggregation
- Extensive protection mechanisms (SNCP, MSP, 2F-MS-SPRing, hardware)
- Data traffic protection scheme via RSTP



### Major benefits for carriers

Increased revenue from new services coupled with significant reductions in operating and capital expenditures open up new sources of profitability to the carrier.

Furthermore, seamless integration into the existing network infrastructure saves considerably on investments, and since the SURPASS hiT 7050 is fully integrated into Nokia Siemens Networks' best-in-class network management system (TNMS), it brings significant operational cost reductions. TNMS provides end-to-end administration and performance monitoring for the complete next generation SDH network, improving operating efficiency, reducing costs for service delivery and simplifying network operations.

SURPASS hiT 7050 supports TDM as well as Ethernet services, thus providing carriers with an extremely cost-efficient platform for multi-service support. The integrated Layer 2 switch module provides switching and overbooking capability, thus offering the additional possibility of multipoint-to-multipoint connections.

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.

### Competitive new capabilities

The SURPASS hiT 7050 improves the carrier's market competitiveness through higher service flexibility, faster service provisioning, reduction in operating and capital expenditures and protection of investments.

It gives carriers a unique competitive advantage by transporting flexible Ethernet services from business customers using reliable SDH technology. Furthermore, the Ethernet services can be offered with high carrier-grade quality as well as best-effort service.

The SURPASS hiT 7050 fits into existing SDH networks, thereby protecting the operator's network and resources investment, while full inter-working with other ITU-T standards-based SDH products is warranted.

### Powerful technological advantages

The SURPASS hiT 7050 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.

The SURPASS hiT 7050 offers

- Very flexible equipment design while offering two chassis versions: FlatPack1 and Compact-Core

- Point-to-multipoint connections and aggregation via an integrated Layer 2 switch to build VPNs
- Bandwidth on demand via GFP mapping and LCAS for Ethernet links
- Interconnection of corporate networks
- Carrier services that can be offered via Ethernet, leased lines, SDH, VLAN, VPN application

### Designed with the future in mind

The SURPASS hiT 7050 has been designed to address the emerging convergence networks. Combining the best of both worlds, the SURPASS hiT 7050 is the optimum solution for all types of mixed TDM and data traffic.

### Key Abbreviations

MSP	Multiplex Section Protection
MS-SPRing	Multi-Section Protection Ring
RSTP	Rapid Spanning Tree Protocol
SNCP	Sub-Network Connection Protection

The SURPASS hiT 7050 helps carriers significantly cut costs, increase revenue through more efficient and new service delivery, and quickly adapt to customers' demands. This makes it a key investment for profitable and future-proof metropolitan networks.

