

# SURPASS hiT 7035 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 7035 is a highly versatile piece of equipment in terms of its applications and equipping options. While covering 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 7035 supports a large variety of data interfaces including Ethernet and ATM-IMA (Inverse Multiplexing over ATM), as well as industry-standard PDH/SDH interfaces. The system also supports Ethernet Layer 2 switching functionality, providing reliable and efficient data transport. The card commonality with other SURPASS hiT 70xx family members simplifies operational logistics and the holding of spares.

### Your customers

get customized bandwidth on demand, 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 7035 key features

- Non-blocking 15.2G@VC-12 with one STM-16/STM-4 port interface on single fabric
- Non-blocking 7.2G@VC-12 with one STM-4/STM-1 port interface on single fabric
- 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
- ATM-IMA aggregation
- Extensive protection mechanisms (SNCP, MSP, 2F-MS-SPRing, hardware)
- Data traffic protection scheme via RSTP
- Suitable for 19-inch and ETSI racks



### 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 the fact that the SURPASS hiT 7035 is fully integrated into Nokia Siemens Networks' best-in-class network management system (TNMS) 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.

The SURPASS hiT 7035 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.

ATM-IMA aggregation capability predestines the equipment for use in the fixed part of a mobile network. The small form factor pluggable (SFP) optical modules are custo-

mized 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

SURPASS hiT 7035 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 quality (carrier-grade) as well as best-effort service.

The SURPASS hiT 7035 fits into existing SDH networks, thereby protecting the operator's network and resources investment, while full interworking with other ITU-T standards-based SDH products is warranted.

### Powerful technological advantages

The SURPASS hiT 7035 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 7035 offers

- Flexible and highly available equipment design
- 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

### Designed with the future in mind

The SURPASS hiT 7035 has been designed to address the emerging convergence networks. Combining the best of both worlds, it is the optimum solution for all types of mixed TDM and data traffic.

### Key Abbreviations

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

The SURPASS hiT 7035 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.

