

SURPASS hiT 7020 Multi-Service Provisioning Platform



Highlights at a glance

The SURPASS hiT 70xx series is the Nokia Siemens Networks next generation SDH platform, enabling true multi-service provisioning and serving the requirements of emerging converged networks.

The SURPASS hiT 7020 is a highly compact and integrated STM-1/STM-4 system designed for use within the customer premises environment. The SURPASS hiT 7020 supports any mix of voice (E1) and data (Fast Ethernet, Layer 2 switch) applications.

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 to enterprise customers, and benefit from an ever-increasing need for data communication services.

Your network

is enhanced, supporting data-based services. It makes optimal use of available capacity and becomes simpler to operate. The SURPASS hiT 7020 brings the client data to your network, improving your market competitiveness through higher service flexibility and faster service provisioning while reducing your operating expenditure.

SURPASS hiT 7020 key features

- System-on-a-chip design
- STM-1 or STM-4 uplink
- 8x2Mbit/s, 4x Fast Ethernet
- Layer 2 switching
- GFP, LCAS and VCAT
- Extensive protection mechanisms (SNCP, MSP, hardware)
- AC and DC power option
- Suitable for 19 inch and ETSI racks

Full integration into Nokia Siemens Networks TNMS

The SURPASS hiT 7020 is fully integrated into the Nokia Siemens Networks network management system (TNMS) 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.

Seamless integration into existing network infrastructure

- SURPASS hiT7020 fits into existing SDH networks and protects the operator's network and resources investment.
- Full interworking with other ITU-T standards-based SDH products is warranted.

Technology advantages

The SURPASS hiT 7020 offers

- System-on-a-chip for high density and cost-efficient design
- AC and DC power option as well as ETSI and 19-inch rack mounting options, allowing operation in telecommunications, data and office environments
- 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



Major benefits for carriers

- Increased revenues from new services
- Significant reductions in OPEX and CAPEX
- Seamless integration into existing network infrastructure
- Fully integrated into Nokia Siemens Networks' best-in-class network management system, TNMS

Increased revenues from new services

- Ethernet-based services can be supported in addition to traditional TDM leased line services.
- A large range of bit rates of variable quality can be offered over a universal Ethernet interface to exactly match customer bandwidth requirements

Significant reductions in investment and operational costs

The SURPASS hiT 7020 is delivered in a great variety of fixed combinations of data and voice interfaces.

With its ability to support both TDM and Ethernet technologies, it provides carriers with an extremely cost-efficient platform for multi-service access to the network, thus reducing OPEX.

It improves market competitiveness through higher service flexibility and faster service provisioning.

The installation effort – and visit to the customer premises – takes place only once, and all service-related changes can be carried out remotely.

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

Ease of use of a metro system – with the power of a long haul system

The extensive automation and customization of network handling reduces training and operational costs, outage times and procedural errors

tremendously. It enables easy and fast remote provisioning of new services, resulting in considerable OPEX savings, additional revenues and business opportunities. The dispersion-robust link design enables installation without any prior measurements of fiber parameters and without any manual optimization steps.

Key abbreviations

| | |
|------|-----------------------------------|
| GFP | Generic Framing Procedure |
| LCAS | Link Capacity Adjustment Scheme |
| MSP | Multiplex Section Protection |
| SLA | Service Level Agreement |
| SNCP | Sub-Network Connection Protection |
| VCAT | Virtual Concatenation |

The SURPASS hiT 7020 is the ideal solution for network operators who are looking for an ultra-compact network element to significantly cut costs and increase revenue through more efficient TDM and data service provisioning.

