

SURPASS hiT 7300 Next-Generation Multi-Haul DWDM Platform

Nokia Siemens
Networks

Highlights at a glance The SURPASS hiT 7300 is a flexible and cost-efficient 40-channel DWDM transport platform that is optimized for high-capacity transport within regional and long-haul networks, and has an optional extension to 80 channels.

It is designed and optimized for bit rates of 2.5 Gbit/s, 10 Gbit/s, and 40 Gbit/s per wavelength.

Your customers

gain from the reliable and fast service provisioning provided by the SURPASS hiT 7300 platform due to its minimized complexity and high degree of system automation.

Your business

grows thanks to SURPASS hiT 7300's flexibility. Its end-to-end service monitoring for all services, even across network domains, allows an impressive range of business opportunities.

A high degree of modularity enables a pay-as-you-grow strategy with a fast return on investment.

Your network

benefits from minimized system handling complexity. Comprehensive automation reduces your operational costs.

Tool-supported network planning, plug-and-play system turn-up and fast automated bandwidth provisioning via GMPLS minimize your operational effort.

SURPASS hiT 7300 key features

- Comprehensive automation of commissioning, service provisioning and software upgrading
- Customized network configuration and operation (customizable parameters and GUI)
- Up to 40 channels, with optional extension to 80 channels, with a maximum 1,600 km reach at up to 40 Gbit/s per channel
- Full range of client interfaces enabling Ethernet (GE, 10GE), SAN, TDM and OTH services
- SNMP and TL-1 management interfaces
- Ultra-flexible solutions for OADM, ROADM and PXC
- OMS and channel protection
- Enabled for ultra-long spans and hut skipping
- Purely passive CWDM or DWDM applications
- Remote network termination
- Tunable laser transponder (full C-band) for fast provisioning of transparent end-to-end services and reduced spares cost
- Remote access and highly effective automation: No system-specific know-how or laptop required for any on-site installation, commissioning, provisioning
- "Flight recorder": Download all diagnostic data from NE with single mouse click for fast troubleshooting
- Interactive online help for all network elements
- Full G.709 implementation enables OTH functionality including end-to-end provisioning and management of wavelengths across multiple vendor sub-networks
- Standard ETSI/ANSI rack mounting (collocation applications are enabled)
- NEBS3 compliant



Further highlights

Comprehensive automation and customization of network configurations minimize system complexity, simplify network operation, administration and maintenance, and eliminate procedural errors.

All types of services (quadruple play, leased lines, business applications, VPN, SAN, etc. at different bit rates) are carried by one multi-haul DWDM platform that can easily and flexibly grow and adapt to your customers' demands.

SURPASS hiT 7300's key building blocks include terminals, optical line amplifiers, OADMs and ROADMs that allow for tailored solutions for any kind of network size and architecture. It offers a full range of transponders and muxponders, based on hot-pluggable SFPs and XFPs, which enable easy configuration of Ethernet (GE, 10GE), SAN, TDM and OTH services.

Smooth planning and operation is guaranteed by means of the easy-to-use TransNet planning tool and integration into TNMS.

One common platform and network management

SURPASS hiT 7300 supports all types of network architectures (point-to-point, ring, mesh) and reaches (e.g. metro core, regional, national and international). Due to its high system flexibility, the SURPASS hiT 7300 platform is cost-optimized for metro, regional links (100 km to 600 km) and long-haul links (up to 1,600 km). It is thus well suited to the needs of carriers running networks with a wide variety of link lengths or fiber types. The SURPASS hiT 7300 is fully integrated into TNMS, Nokia Siemens Networks' best-in-class network management system.

Future-proof system architecture

A future-proof hardware design (with, for example, 40 Gbit/s support), a forward-looking software and control architecture including GMPLS, and remote in-service upgrades protect your investment, permit flexible growth and participation in the newest technologies, and guarantee your return on assets. Our best-in-class planning tool TransNet, approved and deployed by Tier 1 carriers, offers you cost-optimized and advanced network planning.

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.

Nokia Siemens Networks quality at best-in-class cost

This best-in-class cost position is achieved without compromising the Nokia Siemens Networks quality. The modular design of SURPASS hiT 7300, with only one shelf type, minimizes footprint, simplifies the carrier's network, and reduces the range of spare parts that need to be stocked. Furthermore, cost optimization is fulfilled for a wide range of network scenarios by tailoring the network elements to the required EOL channel counts. Transparent optical networking, including remote configuration in ROADMs and PXCs, lowers the cost of electrical regeneration within the network. Automation and customization is realized by intelligent and future-proof software architecture. The SURPASS hiT 7300 constitutes a leading and future-proof cost-optimized DWDM platform with its major strengths in the regional and long-haul domain for both small and large carriers.

SURPASS hiT 7300 – all the ease-of-use of a metro system with the power of a long-haul system!

