

S6AD600H Muxponder Card

The high capacity, high performance Nokia S6AD600H muxponder provides an ideal solution for nx100G aggregation and 400GE transponder applications over metro, regional, and long haul networks. Based on Nokia's photonic service engine (PSE-Vs) coherent optics, the S6AD600H offers the highest levels of 100G – 600G wavelength performance.



The Nokia 1830 Photonic Service Switch (PSS) product family enables cost-effective, efficient aggregation and transport of client services over access, metro, regional and long-haul optical networks. The new S6AD600H muxponder is supported in the 1830 PSS-8, -16ii, and -32 systems, providing aggregation of nx100G client services, as well as WDM transport for 400GE client services.

Benefits

- High performance transport for nx100G and 400G client interfaces
- Advanced probabilistic shaped modulation (PCS) and FEC based on Nokia latest generation PSE-Vs technology
- LH/ULH/Subsea performance in compact card size
- Backward compatibility with existing PSE-3s based transponders
- Supported on Nokia 1830 PSS-8, -16ii, -32 systems

Applications

- High capacity metro, regional, long haul, and subsea applications
- Long-haul data center interconnect (DCI) applications
- Aggregation of nx100GE router interfaces over optical networks
- WDM transponder for 400GE client services
- Aggregate mixed 100GE, OTU4, and 400GE services over same single wavelength



Product description

The S6AD600H is a new, high-performance muxponder for aggregating 100GE, OTU4, and 400GE client services. The WDM line interface is based on the latest generation Nokia PSE-Vs coherent optics.

The S6AD600H muxponder for is designed for use in 1830 PSS -8, -16ii, -32 platforms. The unit includes five QSFP28 client ports for 100GE/OTU4 services and one QSFP56-DD client port capable of supporting 100G/OTU4 or 400GE services. The WDM line port supports 100G – 600G line rates, depending on the provisioned modulation and baud rate profile.

The WDM coherent line interface utilizes the Nokia PSE-Vs coherent DSP, incorporating Nokia 2nd generation probabilistic constellation shaping (PCS), advanced forward error correction (FEC), and fine baud rate tuning.

The S6AD600H is optimized for regional, long-haul, and subsea applications, where high performance capacity and optical reach are needed. The transponder is available in both C-band (S6AD600H) and L-band (S6AD600L), as well as an encryption version (S6AD600E) to support optional high-security encryption applications.

Nokia supported products

The S6AD600H unit is supported on Nokia 1830 PSS-8, -16ii, -32 platforms.

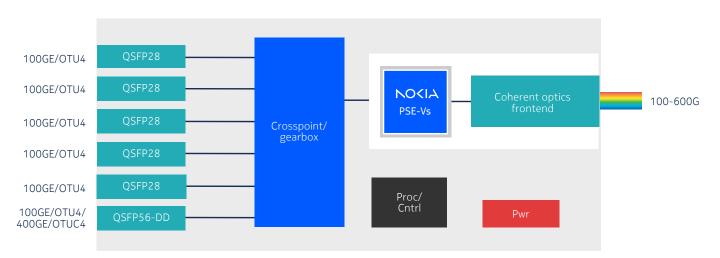


Figure 1. 1830 PSS S6AD600H



| Unit | Part # | Description |
|----------|------------|---|
| S6AD600H | 3KC71192AA | nx100G / OTU4 / 400GE Muxponder |
| S6AD600L | 3KC71722AA | nx100G / OTU4 / 400GE Muxponder, L-Band |
| S6AD600E | 3KC71270AA | nx100G / OTU4 / 400GE Muxponder, Encryption |

| Specifications | S6AD600H | |
|-----------------------|--|--|
| Application | Metro, Regional, LH, Subsea | |
| Line Port | 100G – 600G provisioned (QPSK – QAM16, PCS) 33 – 90 Gbaud | |
| | Nokia PSE-Vs coherent optics | |
| FEC Options | Nokia SDFEC-G2/-G3 | |
| Client ports | 5 x QSFP28 100GE/OTU4 | |
| | 1 x QSFP56-DD 400GE | |
| Power consumption | 130 W (typ) | |
| Features | 5x100G / 1x 400GE Muxponder | |
| | Advanced Nokia Gen3 FEC, with G2 FEC for backward compatibility 2nd generation PCS | |
| | Non-linear compensation | |
| | Fine baud rate tuning | |
| | GCC0 remote management | |
| | LLDP snooping | |
| | LO Restoration (GMPLS) | |
| Protection | O-SNCP & OCH optical layer protection | |
| Operating environment | Normal 5°C to 40°C (41°F to 104°F) | |
| | Humidity 5% to 85% | |
| Physical | 2-slot, half-height | |
| 1830 PSS shelves | 32, 16ii, 8, | |

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