

Nokia 7705 Service Aggregation Router

Optical Add-Drop Multiplexer (OADM) adapter cards and modules

The Nokia 7705 Service Aggregation Router (SAR) Optical Add-Drop Multiplexer adapter cards and modules are an ideal solution for network operators with access to fiber facilities who are seeking to increase the value and efficiency of their optical infrastructure by adding CWDM capability.

The Nokia 7705 SAR OADM adapter cards are supported on the 7705 SAR-8 and the 7705 SAR-18 platforms. All these passive optical devices support inservice insertion and removal, and are temperature hardened.

The ability to add and drop, and to multiplex and de-multiplex wavelengths in a 7705 SAR network, brings opportunities for capacity increase without adding undue complexity or cost.

Features and benefits

- Enables a scalable, resilient integrated solution for building higher bandwidth backhaul rings, thus eliminating the need for separate devices to perform this function.
- Allows through the use of wavelength-division multiplexing (WDM) a higher number of 7705 SARs to be deployed around a ring by removing the need for a large amount of tandem traffic processing.
- The OADM cards can be installed in any of the 6 adapter card slots in the 7705 SAR-8 or the 12 equivalent slots in the 7705 SAR-18.
- Allows the mixing of a GE, 10GE and existing SONET links on the same fiber infrastructure.
- Synchronous Ethernet with Ethernet Synchronization Messaging Channel is fully supported over this optical network.



8-color CWDM mux/demux for 7705 SAR-8/18



1-color CWDM OADM for 7705 SAR-8/18



 A range of 1-, 2- and 4-color add/drop adapter cards are available for 7705 SAR-8 and SAR-18 devices to attach to a ring or daisy chain optical infrastructure. The 8-color mux/demux variant

is also available, typically for deployment at the headend of an optical ring or daisy chain topology. See Table 1 for a summary of the range of available OADM adapter cards.

Table 1. CWDM passive optical adapter cards for the 7750 SAR-8 and 7705 SAR-18

Part number	Part name	Description
3HE06582AA-AH (8 part numbers)	7705 SAR-89/18 OADM ADD/DROP CWDM, 1 color	1-color CWDM add-top OADM module for the SAR-8/198. One Tx wavelength and one Rx wavelength are filtered for the East and West directions. Eight part instances are available with selected wavelengths: 1471 nm, 1491 nm, 1511 nm, 1531 nm, 1551 nm, 1571 nm, 1591 nm and 1611 nm.
3HE06583AA-AD (4 part numbers)	7705 SAR-8/189 OADM ADD/DROP CWDM, 2 color	2-color CWDM add-top OADM module for the SAR-8/18. Two Tx wavelengths and two Rx wavelengths are filtered for the East and West directions. Four part instances are available with selected wavelengths: 1471 nm and 1491 nm, 1511 nm and 1531 nm, 1551 nm and 1571 nm, 1591 nm and 1611 nm.
3HEO6584AA	7705 SAR-8/18 OADM 1471/1491/1511/1531	4-color CWDM add-top OADM module for the SAR-8/18. One Tx, wavelength and one Rx wavelength at each of 1471 nm, 1491 nm, 1511 nm and 1531 nm are filtered from the line (single direction) with expansion port.
3HE06584AB	7705 SAR-8/18 OADM 1551/1571/1591/1611	4-color CWDM add-top OADM module for the SAR-8/18. One Tx wavelength and one Rx wavelength at each of 1551 nm, 1571 nm, 1591 and 1611 nm are filtered from the (single direction) with expansion port.
3HE06585AA	7705 SAR-8/18 8 COLOR MUX/DEMUX 1471-1611	8-color CWDM optical Mux/Demux module for the SARp-8/18. One Tx and one Rx at each of 1471 nm, 1491 nm, 1511 nm, 1531 nm, 1551 nm, 1571 nm and 1611 nm are filtered from the line (single direction).

Technical specifications

Dimensions and weight

Height: 0.9 in. or 2.24 cmWidth: 6.7 in. or 17.0 cmDepth: 8.7 in. or 22.0 cm

• Weight: 0.86 lbs or 0.38 kg

Environmental specifications

 Operating temperature: -40°C to 65°C (-40°F to 149°F)

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