CHP Max
Headend Optics Platform

CHP OPTICAL SWITCH
Dual Optical A/B Switches

FEATURES

- High density to reduce footprint with a dual density, single slot unit with 2 independent switches
- Improve network services and customer Quality of Experience (QoE) with redundant rings and route diversity
- Very low power with less than 1W typical consumption
- Automatic and manual switching using front panel pushbutton or remotely through the SNMP or CORView™ Element Management System (EMS)
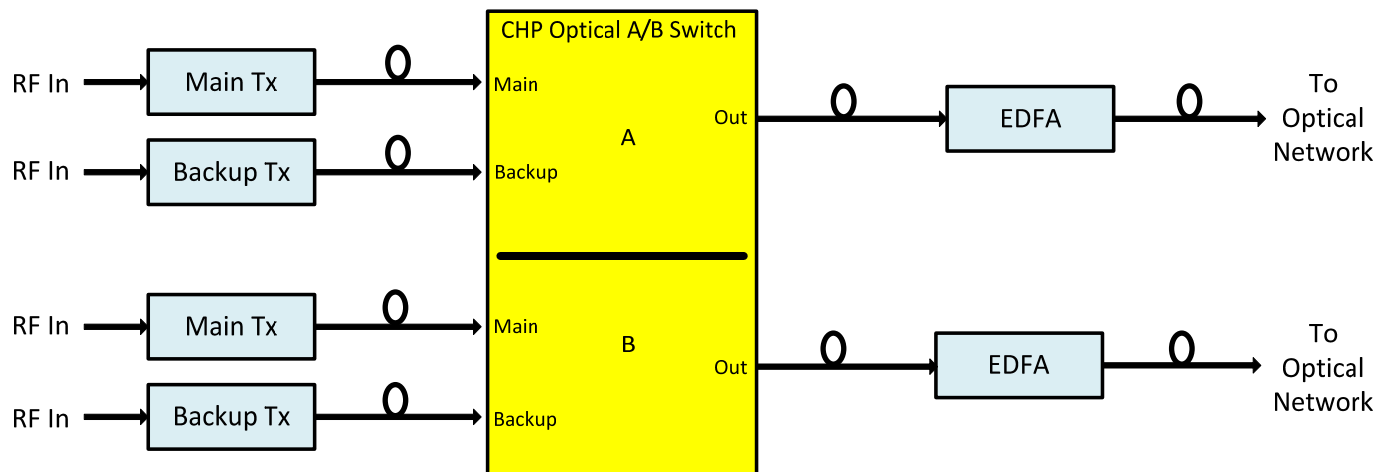
PRODUCT OVERVIEW

The CHP Max optical switch provides operators with a reliable and rapid response to changing network conditions, enabling them to proactively identify and fix problems before they impact subscribers. Cable operators can expect a reliable and rapid response to changing network conditions with the CHP Max optical switch design that leverages the installed base of CHP Max5000® chassis, preserving deployed capital. Each channel of the Optical Switch Module accepts two optical signals ("A," the primary path, and "B," the backup path). The unit's microcontroller continuously monitors each fiber's optical signal power level and the adjustable optical trip threshold for each path.

Operators can configure the optical switch in Automatic or Manual Switch Mode. When configured for Automatic Switch Mode, the optical switch will automatically switch to the backup fiber path if the primary path falls below the optical switch threshold that is set by the operator. When optical power is restored to the primary path, the switch will automatically switch back to the primary path. When placed in Manual Switch Mode, the optical switch will remain on the path selected by the operator until the operator selects the other path or returns the unit to Automatic Switch Mode. Operators can select Automatic and Manual Switch Mode by using the unit's front-panel pushbutton switch, through the SNMP, or via CORView™ EMS.

NETWORK DIAGRAM

Operational Requirements

SMM	SMM-2 only
CMM	No
CHP Craft software	No
CHP CORView/CORView Lite	V3.5 or later
Auto Configuration supported	No

RELATED PRODUCTS

CHP Chassis	Optical Patch Cords
Power Supplies	Optical Passives
Control Module	Installation Services

SPECIFICATIONS

Optical	
Operating Wavelength Range	1260 – 1610 nm
Input Optical Power Range	−20 dBm to +20 dBm
Insertion Loss	< 2 dB
Optical Crosstalk	> 50 dB
Optical Return Loss	> 45 dB
Switching	
Switching Time	< 20 ms
Switch Type	Latching, Opto-Mechanical
Optical Switching Threshold Ranges	−20 dBm to +18 dBm
Restore Time	0 to 10 minutes in 1 second increments
Powering	
Power Consumption	< 2 W, maximum, 1 W typical
Mechanical	
Optical Connectors	LC/APC
Dimensions[1] (W x H x D)	1.25 x 3.4 x 18.5 in. (3.2 x 8.7 x 47.0 cm)
Weight	2.5 lb. (1.3 kg)
Environmental	
Operational Temperature[2]	32 to 122 °F (0 to 50° C)
Storage Temperature	−40 to 158 °F (−40 to 70° C)
Humidity, non-condensing, max.	85%

Notes:
1. Includes handles and connectors.
2. Temperature measured at optical switch's module's air inlet.

Note: Specifications are subject to change without notice.

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Customer Care

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

Ask us about the complete Access Technologies Solutions portfolio: **Headend Optics-CHP**

Fiber-Deep   **DOCSIS® 3.1**   **Node Segmentation**   **HPON™/RFoG**   **FTTx**