THE H-SERIES
PASSIVE OPTICAL NETWORKING PLATFORM
CWDM and DWDM Mux/Demux and DWDM OADMs units

The Smartoptics H-Series is a high density, cost-efficient platform for passive optical layer nodes such as CWDM and DWDM multiplexers/demultiplexers and OADMs (Optical Add Drop Multiplexer). Using best of breed components, the H-Series offers the latest generation of solutions to your passive optical networking needs. Special attention has been paid to handling, compactness and flexibility, resulting in a 1 RU chassis housing a variety of filter modules and giving you up to five times higher packaging density than previous solutions. The H-Series is fully compatible with the ITU optical grid and interconnects seamlessly with Smartoptics transponder and muxponder product lines as well as with other vendors' products.

H-SERIES IN SHORT

The H-Series platform comprises of a high-density 1 RU chassis that can be equipped with combinations of filter modules for state of the art CWDM and DWDM Mux/Demux and DWDM OADM applications.

- Expands existing fiber capacity regardless of service
- 4-16 CWDM wavelengths Mux/Demux units
- 8-40 DWDM wavelengths Mux/Demux units
- 4 channel DWDM OADM units, one- and two-way filter solutions
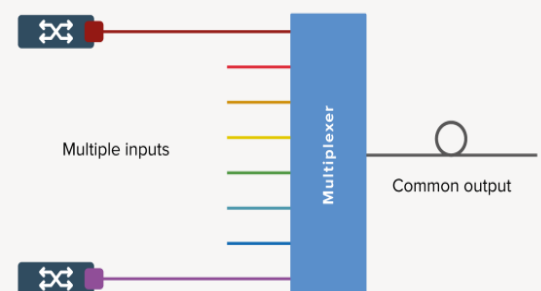- Monitor ports on all DWDM Mux/Demux units

APPLICATIONS

The H-Series is ideal when implementing fully passive optical layer solutions transparent to any data rate and service type. The different modules can be combined to provide point-to-point, bus or ring topologies to utilize an existing fiber infrastructure more efficiently. The H-Series filters are passive devices and can be placed in locations without electrical power. They are also vendor solution independent since no SW integration is required. This results in a high reliability solution. The H-Series supports the industrial temperature range of -40ºC to +85ºC (-40°F to +185°F) which gives an extended application range into sites without temperature control.

CWDM MUX/DEMUX FILTERS
The CWDM solution can carry up to 16 different wavelengths on a fiber-pair connection. The primary 8 channels operate in the 1500 nm band and the secondary 8 channels operate in the 1300 nm band.
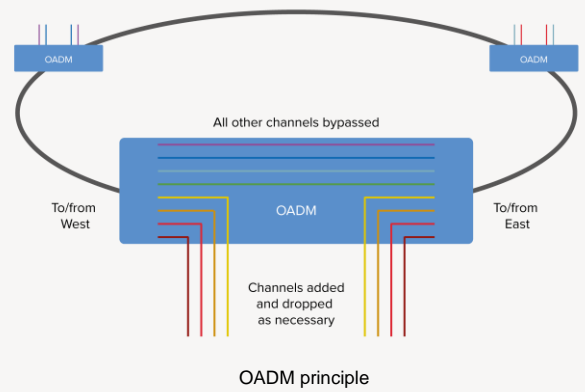
DWDM MUX/DEMUX FILTERS
Up to 40 channels can be carried through the DWDM filters on a fiber-pair connection. The channel spacing is 0.8 nm (100GHz) and the channels reside in the 1530 to 1565nm C-band.
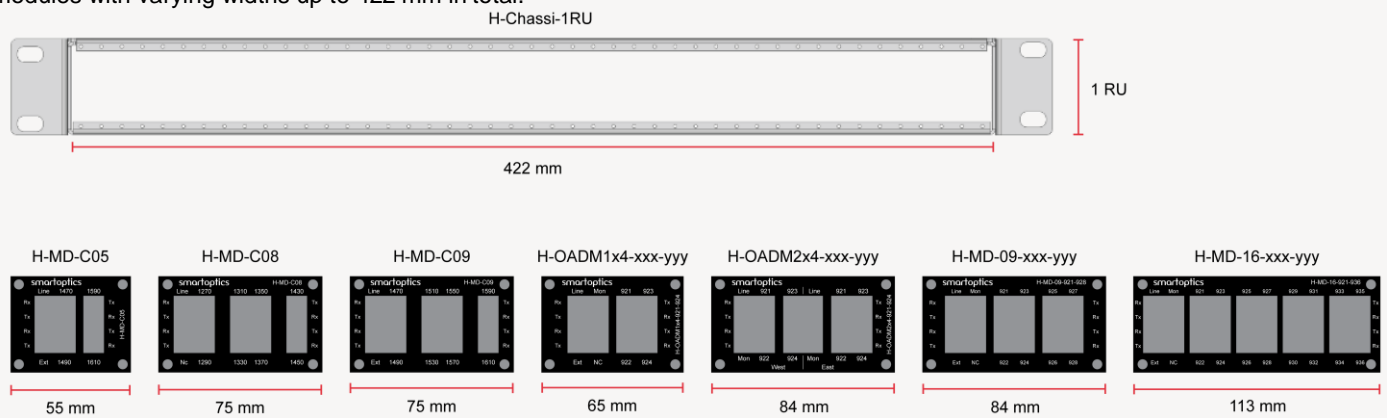

Mux/Demux principle

DWDM OADM FILTERS

An OADM filter unit terminates a subset of wavelengths on a DWDM connection. The OADMs filters add and drop up to four channels while the remaining wavelengths are glassed through the filter. An OADM filter is used to create bus/ring networks when only a few wavelengths are required at specific sites.

OADM principle

THE HIGH-DENSITY H-SERIES 1 RU CHASSIS

H-Series filer modules are accompanied by a flexible yet robust high density 19" 1RU chassis that supports a variety of filter types (with different modular sizes) and different rack mounting configurations (recessed, mid and flush). The chassis can handle filter modules with varying widths up to 422 mm in total.

H-Chassi-1RU

1 RU

422 mm

H-MD-C05	H-MD-C08	H-MD-C09	H-OADM1x4-xxx-yyy	H-OADM2x4-xxx-yyy	H-MD-09-xxx-yyy	H-MD-16-xxx-yyy
55 mm	75 mm	75 mm	65 mm	84 mm	84 mm	113 mm

COMMON SPECIFICATION ALL PRODUCTS

Operating temperature	-40 to +85 °C
Storage temperature	-40 to +85 °C
Relative humidity	5 to 95%
Max optical power	500 mW

ORDERING INFORMATION AND QUICK SPECIFICATION

Part number	Type	Application	Channels	Monitor port	Extension port	Width mm
H-MD-C05	Mux/Demux	CWDM	4	No	Yes	55
H-MD-C08	Mux/Demux	CWDM	8	No	No	75
H-MD-C09	Mux/Demux	CWDM	8	No	Yes	75
H-OADM1x4-xxx-yyy	OADM	DWDM	4	Yes	N/A	65
H-OADM2x4-xxx-yyy	OADM	DWDM	4	Yes	N/A	84
H-MD-09-xxx-yyy	Mux/Demux	DWDM	8	Yes	Yes	84
H-MD-16-xxx-yyy	Mux/Demux	DWDM	16	Yes	Yes	113
H-Chassi-1RU	1 RU chassis, width 422 mm					

Subject to change without notice.

For more information visit smartoptics.com.

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