THE H-SERIES PASSIVE OPTICAL NETWORKING PLATFORM
CWDM and DWDM mux/demux and OADMs

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 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
- 8-40 DWDM wavelengths mux/demux
- 4 channel OADMs, single and dual degree solutions
- Monitor ports on all DWDM mux/demux

APPLICATIONS
The H-Series is ideal when implementing fully passive optical layer solutions transparent to any data rate and service type. Used as a mux/demux it will multiplex new services over an existing fiber infrastructure without any need for power supply or active equipment. And as an OADM it can for example be used in cost-efficient add/drop rings.

CWDM MUX/DEMUX
CWDM passive solutions carry up to 16 different wavelengths down a single fiber connection. The optical combining and splitting of wavelengths is a passive technology and a mux/demux unit requires neither electrical power nor software resulting in greatly increased reliability. The primary 8 channels operate in the 1500 nm band and the secondary 8 channels operate in the 1300 nm band.

DWDM MUX/DEMUX
DWDM passive solutions theoretically carry up to 80 different wavelengths down a single fiber connection. The optical combining and splitting of wavelengths is a passive technology and a mux/demux unit requires neither electrical power nor software resulting in greatly increased reliability. The channel spacing is typically 0.8 nm and the channels reside in the 1530 to 1560 nm band.
OADM
An OADM unit terminates a subset of wavelengths in a WDM system. OADMs typically add, or add and drop, 1, 2 or 4 wavelengths and the remaining wavelengths are bypassed (expressed) through the fiber. An OADM is often used to create ring networks and when only a few wavelengths are required at specific sites.

THE HIGH-DENSITY H-SERIES 1 RU CHASSIS
H-Series filter modules are accompanied by a flexible yet robust high density 1RU chassis that supports a variety of filter types (with different modular sizes) and different mounting configurations (recessed, mid and flush). An empty chassis can handle filter modules with varying widths up to 430 mm in total.

COMMON SPECIFICATION ALL PRODUCTS
Operating temperature -40 to +85 °C
Storage temperature -40 to +85 °C
Relative humidity 5 to 95%
Max power handling 500 mW

ORDERING INFORMATION AND QUICK SPECIFICATION

<table>
<thead>
<tr>
<th>Part number</th>
<th>Type</th>
<th>Application</th>
<th>Channels</th>
<th>Monitor port</th>
<th>Extension port</th>
<th>Width mm</th>
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<tbody>
<tr>
<td>H-MD-C05</td>
<td>Mux/demux</td>
<td>CWDM</td>
<td>4</td>
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<td>55</td>
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<td>Mux/demux</td>
<td>CWDM</td>
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<td>75</td>
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<td>Mux/demux</td>
<td>CWDM</td>
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<td>No</td>
<td>Yes</td>
<td>75</td>
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<tr>
<td>H-OADM1x4-xxx-yyyy</td>
<td>OADM</td>
<td>DWDM</td>
<td>4</td>
<td>No</td>
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<td>OADM</td>
<td>DWDM</td>
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<tr>
<td>H-MD-09-xxx-yyyy</td>
<td>Mux/demux</td>
<td>DWDM</td>
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<td>Yes</td>
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<td>84</td>
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<tr>
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<td>DWDM</td>
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<td>1 RU chassis, width 430 mm</td>
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