RF Over Fiber Systems
CWDM/DWDM Mux/De-Mux

**CWDM/DWDM Mux/De-Mux**

- 8 & 16 Way CWDM Mux/De-Mux
- 8, 16, 32, 64 Way DWDM Mux/De-Mux
- Channels can be customer specific
- Compatible with any RF frequency
- 1U/2U rack chassis
- Standard 5-year warranty

The ViaLiteHD CWDM/DWDM multiplexers and de-multiplexers are available in 8 to 64-way variants and boast low insertion loss. They are available as part of a Ka-Band diversity system, long distance system (up to 600 km) or as a stand-alone product.

ViaLite Multiplexers are based on thin film filtering and metal sealing technology to give a flat channel bandwidth response, flexible channel configuration and low insertion loss with high isolation.

This system has the advantage of a flexible channel configuration and modularized design making it convenient for system upgrades and expansions.

### FEATURES

- Low Insertion loss
- Rack mountable
- Passive device
- High channel isolation
- Low insertion loss
- High stability and reliability
- Compact design

### OPTIONS

- FC/APC, SC/APC
- CWDM 1270 –1610 nm
- 50 GHz or 100 GHz channel spacing
- Custom channel numbering
- C-Band 1528.77 nm – 1563.86 nm
- L-Band 1569.59 nm – 1604.03 nm

### APPLICATIONS

- Fixed satcom teleports
- Ka-Band diversity systems
- L-Band medium & long distance links
- Oil and gas platforms
- Networks with limited fiber availability

### RELATED PRODUCTS

- Long distance links
- CWDM links
- DWDM links
- Diversity links
- L-Band HTS 700-2450 MHz

### ViaLite System Designer

For complex designs where multiple CWDM / DWDM products are required the System Designer tool is essential for predicting and validating performance results. The software uses a drag and drop approach from a pallet of products. Once designed, the analyzer can be run to give end-to-end system results and these can then be saved as a detailed PDF. Please ask our sales team for more information.
### Product Configurator

<table>
<thead>
<tr>
<th>HRM</th>
<th>D</th>
<th>60</th>
<th>T</th>
<th>ZZ</th>
<th>D</th>
<th>016</th>
<th>BA</th>
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</thead>
</table>

- **Model type**: Multiple
- **Module type**: HRM - ViaLiteHD
- **Frequency Type**: 6 - 1550nm CWDM, 5 - 1550nm Optical Linking, 4 - 1550nm Optical Linking (Standard)
- **Module Package**: 7 - 10 YF Chassis, 6 - 20 YF Chassis
- **Model Code (MID)**: 2 - 166

### Technical Specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>HRM-D-60-8T-ZZ-D016-BA</td>
</tr>
<tr>
<td>Operational Wavelength</td>
<td>1528.77 nm – 1563.86 nm</td>
</tr>
<tr>
<td>Operational Centre Wavelength</td>
<td>1569.59 nm – 1604.03 nm</td>
</tr>
<tr>
<td>Center Wavelength accuracy</td>
<td>ITU Grid 100GHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>100 GHz</td>
</tr>
<tr>
<td>Channel Passband ( @ -0.5dB Bandwidth )</td>
<td>ITU +/- 0.11</td>
</tr>
<tr>
<td>PMD (Polarization Mode Dispersion)</td>
<td>&lt;0.1ps</td>
</tr>
<tr>
<td>Bandpass Insertion Loss</td>
<td>&lt;3.0 dB 8 Way</td>
</tr>
<tr>
<td></td>
<td>&lt;5.2 dB 16 Way</td>
</tr>
<tr>
<td></td>
<td>&lt;10.0dB 32 Way</td>
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<tr>
<td>Isolation optical non-adjacent channels</td>
<td>&gt;35 dB</td>
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<tr>
<td>Isolation optical adjacent channels</td>
<td>&gt;25 dB</td>
</tr>
<tr>
<td>Directivity</td>
<td>&gt;50 dB</td>
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<tr>
<td>Return Loss</td>
<td>&gt;50 dB</td>
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<tr>
<td>Fiber Type</td>
<td>SMF-28e with 0.9mm Loose Tube</td>
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<tr>
<td>Operating Temperature</td>
<td>0°C to + 70°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-40°C to +85°C</td>
</tr>
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</table>
ACCESSORIES

RF over Fiber L-Band HTS DWDM Links

- L-Band HTS (700-2450 MHz)
- Up to 500 km systems available
- 1 to 96 channels per fiber
- Ideal for Ka-Band rain fade diversity
- 5 mW Laser

RF over Fiber Timing modules

- Radio timing signals:
  - DCF, MSF signals
  - JJY, BPC, HBG, TDF, WWVB, WWV, CHU, RJH, RWM,
- IRIG-B
- Loran-C & eLoran
- 10kHz – 50 MHz signals
- GPS (via GPS Link)
- MiFID II standard

Rack Chassis

- 3U accepts up to 13 RF or Support cards, plus an SNMP card and dual power supplies
- A 1U chassis accepts up to 3 RF or Support cards or 2 cards and an SNMP card (with dual power supplies)
- Up to 26 channels per 3U chassis (using dual RF cards) – reducing the amount of rack space required
  - Blind mate option
  - All modules hot-swappable and auto-reconfigure with SNMP option
- On-card LNB and BUC power options
- Power fed through rear chassis connector to card Bias Tees
- System can be monitored and controlled remotely via SNMP using a web browser

Outdoor Enclosures

- CE approved and EMC compatible
- IP rated and NEMA approved
- Plug and play format
- Suitable for harsh environments
- All modules hot swappable
- Dual redundant power options
- Interface for monitor and control (M&C) systems