RF Over Fiber Systems
Optical Switch

Optical Switch
• DWDM & CWDM support product
• 2x1 & 2x2 way optical switch
• Low insertion loss
• SNMP and serial control
• Front panel controls
• Fast switching time (20 ms)
• Standard 5-year warranty

The ViaLiteHD Optical Switch has been designed specifically for fast switching between local and remote locations in Ka-Band satcom diverse antenna applications.

The 2x2 switch allows system configurations to be switched between local and diverse sites as well as having the capability of feeding the off-air optical signals into a monitoring receiver when not being used.

This allows the user to have an alarm status of their off-air channels thus improving system confidence and availability. Standard 2x1 switches are also available.

APPLICATIONS
• Ka-Band diversity systems
• Fixed satcom earth stations and teleports
• Broadcast facilities
• VSAT hubs (IP gateways)
• Television Receive-Only (TVRO)

RELATED PRODUCTS
• 50 km CWDM systems
• Optical Amplifiers (EDFA)
• Delay Lines
• DCMs
• Lossless Optical Splitter

ViaLite System Designer
For complex designs where multiple 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**

**POPULAR PRODUCTS**

HRS-6-OB-BT-00 - 2x2 Optical switch 1U 19" rack mount with dual redundant PSU's

**TECHNICAL SPECIFICATIONS FOR 2x2 SWITCH**

<table>
<thead>
<tr>
<th>Performance</th>
<th>Index</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wavelength range (nm)</td>
<td>1528</td>
<td>1620</td>
</tr>
<tr>
<td></td>
<td>1260</td>
<td>1620</td>
</tr>
<tr>
<td>Insertion loss (dB)</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>Return loss (dB)</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>Switch cross talk (dB)</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>PDL (nm)</td>
<td></td>
<td>0.2</td>
</tr>
<tr>
<td>Switching time (ms)</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Fiber type</td>
<td>9 / 125</td>
<td></td>
</tr>
<tr>
<td>Optical connector</td>
<td>FC/APC, FC/PC</td>
<td>Optional SC, LC</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/100M Ethernet interface</td>
<td>RJ45</td>
<td></td>
</tr>
<tr>
<td>Fiber type</td>
<td>SNMP</td>
<td></td>
</tr>
<tr>
<td>Optical connector</td>
<td>RS232</td>
<td></td>
</tr>
<tr>
<td>Power supply (VAC)</td>
<td>90</td>
<td>265</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 / 60 Hz</td>
</tr>
<tr>
<td>Work temp (°C)</td>
<td>-20</td>
<td>65</td>
</tr>
<tr>
<td>Storage temp (°C)</td>
<td>-40</td>
<td>85</td>
</tr>
<tr>
<td>Operating relative humidity (%)</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>Size (W) x (D) x (H)</td>
<td>19 10 1.75 inches</td>
<td>483 254 44mm</td>
</tr>
</tbody>
</table>
RF Over Fiber Systems
Optical Switch

ACCESSORIES

SNMP/Web Browser Card
- Easy to use graphical user interface (GUI)
- Real time monitoring of card performance
- Alarm monitoring and event logging
- Control of gain adjustment
- Compatible with all ViaLiteHD rack chassis and cards
- Easy integration with network management systems (NMS) using management information base (MIB) tables
- Actively manage redundancy switching
- New RF cards can be automatically reprogrammed with the previous card parameters
- Remote SNMP to local SNMP connection via optical fiber
- Provides remote LAN 10/100 Ethernet link

Dual Redundancy
- 1:1 redundancy for L-Band
- Maximises link up-time
- Can be used to backup copper coax
- Manual and automatic control via SNMP
- Flexible configuration options
- Other redundancy options available

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