**RF Over Fiber Systems**  
**Multizone Distribution Lossless Splitter**

**Lossless Optical Splitter**
- Point to multipoint
- 8, 16, 32 & 64 way splitting with no loss
- 1550 nm or DWDM wavelengths
- Compatible with any RF frequency
- 1U & 2U Rack Chassis
- Standard 5-year warranty

The ViaLiteHD Multizone Distribution Lossless Splitter allows for multiple receive points to be supplied by one transmitter with zero optical loss. It can be used with any ViaLite RF over fiber frequency band, but is typically used in any fan-out application in satcom or timing applications, such as GPS or 10 MHz reference.

The lossless splitter utilizes the low loss 1550 nm wavelength or any of the ITU DWDM channels for longer distances.

When used with a combiner, zero loss is possible with fan-in/fan-out and combined transmit and receive systems. These systems are designed with a focus on datacenter timing, satcom, cellular and public safety applications. The lossless optical splitter comes with options for SC/APC and FC/APC connectors with 8, 16, 32 or 64 outputs.

**Applications**
- Fixed satcom earth stations and teleports
- Data center timing
- Banking institution timing
- Scientific timing distribution
- Cellular test environments
- Cellular in-building distribution
- Oil and gas platforms

**Related Products**
- Up to 50 km L-Band HTS
- GPS RF over Fiber Links
- Timing RF over Fiber Links
- Multizone Distribution Combiners
- DWDM Links

**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.
RF Over Fiber Systems
Multizone Distribution Lossless Splitter

PRODUCT CONFIGURATOR

HRZ-1-0B-8T-00-X008 – ViaLiteHD Multizone 8-Way Lossless Splitter, Dual PSU, 1550 nm input
HRZ-1-0B-8T-00-X016 – ViaLiteHD Multizone 16-Way Lossless Splitter, Dual PSU, 1550 nm input
HRZ-1-0B-8T-00-D032 – ViaLiteHD Multizone 32-Way Lossless Splitter, Dual PSU, DWDM input
HRZ-1-0B-8U-00-D064 – ViaLiteHD Multizone 64-Way Lossless Splitter, Dual PSU, DWDM input

POPULAR PRODUCTS

TYPICAL CONFIGURATION
## TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>HRZ-1-OB-8T-00-X008</th>
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<tbody>
<tr>
<td>Gain</td>
<td>0 dB (Unity Gain) Input to Output</td>
</tr>
<tr>
<td>Gain adjustment range</td>
<td>-6 dB (typ)</td>
</tr>
<tr>
<td>Input level 1550 nm version (X)</td>
<td>+4.5 dBm (typ)</td>
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<tr>
<td></td>
<td>+5.0 dBm (typ)</td>
</tr>
<tr>
<td>Input level DWDM version (D)</td>
<td>+7.0 dBm (typ)</td>
</tr>
<tr>
<td></td>
<td>+7.5 dBm (typ)</td>
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<tr>
<td>Output level on each port 1550 nm version (X)</td>
<td>+4.5 dBm (typ)</td>
</tr>
<tr>
<td>Output level on each port DWDM version (D)</td>
<td>+7.0 dBm (typ)</td>
</tr>
<tr>
<td>Output variation across all ports</td>
<td>±0.5 dB (typ)</td>
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<tr>
<td>Number of output ports</td>
<td>8 (16 &amp; 32 available)</td>
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<tr>
<td>Input to output isolation</td>
<td>30 dB (typ) Optical, 60 dB RF</td>
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<tr>
<td>Power consumption</td>
<td>50 W (typ)</td>
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<tr>
<td>SNMP Interface</td>
<td>RJ45</td>
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<tr>
<td>Input power</td>
<td>90-265 VAC</td>
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<tr>
<td>Optional DC power</td>
<td>30-72 VDC</td>
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<tr>
<td>Operating temperature range</td>
<td>-5 °C to +65 °C</td>
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<tr>
<td>Storage temperature range</td>
<td>-40 °C to +80 °C</td>
</tr>
<tr>
<td>Humidity</td>
<td>95% non-condensing humidity</td>
</tr>
</tbody>
</table>
ACCESSORIES

RF over Fiber L-Band HTS DWDM Links

- Transmits all common GPS, GALILEO and GLONASS bands
- L1 and L2 GPS frequencies
- Link operation 1m to 50 km
- >50 km systems also available
- GPS antenna powering and monitoring
- Time server load input/spoofing
- Simple plug and play
- MiFID II standard

RF over Fiber Timing modules

- Radio timing signals:
  - DCF, MSF signals
  - JJJ, BPC, HBG, TDF, WWVB, WWV, CHU, RJH, RWM, Loran-C & eLoran
  - 10kHz – 50 MHz signals
  - 1PPS (via Digital Data Link)
  - 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