RF Over Fiber Systems
EDFA

Erbium-Doped Fiber Amplifiers (EDFA)

- Next generation variable gain EDFA
- Single or multi-channel EDFA available
- 8 dB to 36 dB gain variants
- SNMP and RS232 control
- Fast start-up time
- AGC (Automatic gain control)
- Bi directional Option
- Standard 5-year warranty

The ViaLiteHD Erbium Doped Fiber Amplifier (EDFA) is available in either a single channel or multi-channel format depending on where it is utilized in the system.

The EDFA's have low noise figures and variable gain ensuring the optimization of link noise figure and performance.

They are available as part of a Ka-Band diversity antenna system, ultra-long distance system (up to 600 km) or as a stand-alone product.

### APPLICATIONS

- Ka-Band diversity rain fade application
- Fixed satcom earth stations and teleports
- Gateway reduction within a satellite footprint
- Government installations
- Remote monitoring stations
- Remote oil and gas locations
- Remote wind farm locations

### FORMATS

- 1U Chassis

### RELATED PRODUCTS

- 50 km 1550 nm L-Band HTS
- 50 Ohm DWDM L-Band HTS
- >50 km systems
- DWDM Multiplexers
- Optical Switches
- Optical Delay Lines

### OPTIONS

- Low noise figure
- SNMP and RS232 control
- Fixed gain, auto power control, auto gain control software selectable
- Low switching time
- 8 dB, 18 dB, 20 dB, 23 dB, 24 dB, 33 dB or 36 dB gain (other gain variants available)
- Single channel or multiple channel

### POPULAR PRODUCTS

HRA-3-0B-8T-AF-D001 - ViaLiteHD EDFA, 24 dB Optical Amplifier, single channel
HRA-4-0B-8T-AB-D008 - ViaLiteHD EDFA, 13 dB Optical Amplifier, 8 channels
### TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Specification</th>
<th>HRA-4-CB-8T-ZZ-D016-BC</th>
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<tbody>
<tr>
<td>Part Number</td>
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<tr>
<td>Frequency range</td>
<td>Not Frequency Dependent</td>
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<tr>
<td>Gain</td>
<td>9 dB</td>
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<tr>
<td>Gain adjustment range</td>
<td>Fixed</td>
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<tr>
<td>Input level</td>
<td>-0 - +14 dBm</td>
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<td>Saturation O/P Power</td>
<td>+23 dB (typ)</td>
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<td>Noise Figure (at default gain)</td>
<td>5 dB (typ)</td>
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<td>SNMP Interface</td>
<td>RJ45</td>
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<td>Input power</td>
<td>90-265 VAC</td>
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<td>Operating temperature range</td>
<td>-20 °C to +65 °C</td>
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<td>Storage temperature range</td>
<td>-40 °C to +80 °C</td>
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<tr>
<td>Humidity</td>
<td>5% non-condensing humidity</td>
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### PRODUCT CONFIGURATOR

![Diagram of the product configurator](image.png)
RF Over Fiber Systems
EDFA

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,
- IRI-G-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