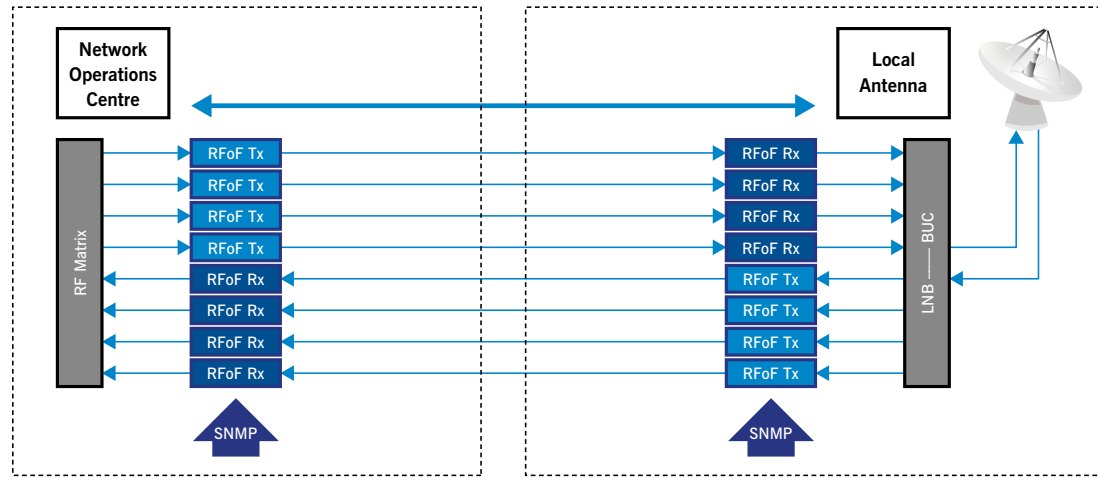
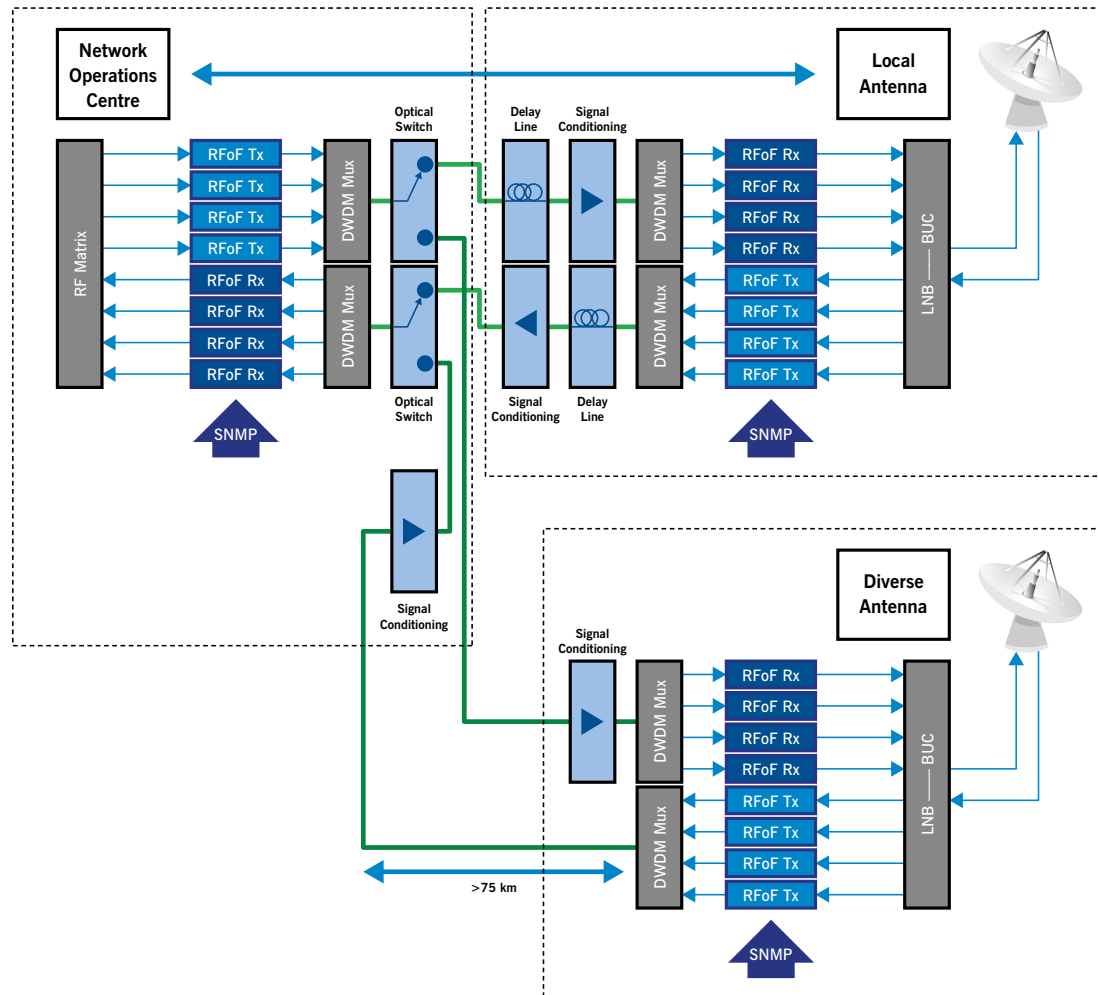


Inter Facility Link (IFL) example



Long Distance Link (LDL) example



Fiber links for many applications

Fixed/Mobile Satellite Stations | Broadband VSAT systems | Broadcast | Oil & gas platforms | OEM | Mil-Aero | Maritime | TVRO

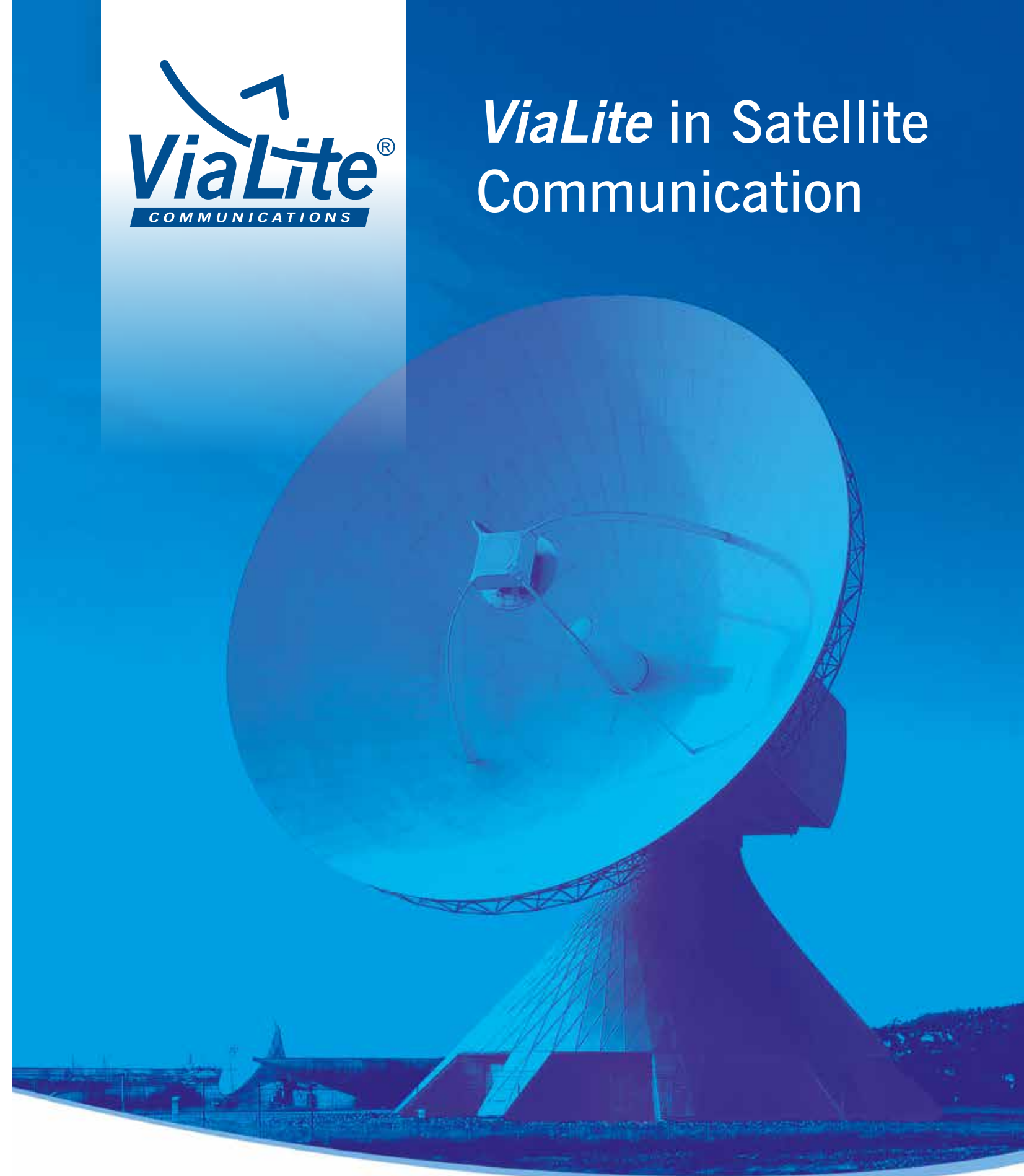


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ViaLite in Satellite Communication



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Satcom RF over fiber technology

In teleports and satellite ground stations, RF over fiber links are a superior alternative to copper coax for the interfacility links needed to transport RF between the antennas and control rooms.

- Bandwidth ranges available from 2 kHz to 7.5 GHz
- Longer distances – links up to 600 km
- Lightning protection
- Secure medium – cannot be tapped
- High dynamic range
- Simple to use (no extensive product training required)
- LNA/LNB power feeds
- LAN extensions
- Equipment control
- Reference signals

In many locations site expansion has pushed conventional copper coax to its operational limits, resulting in signal attenuation, signal degradation and the requirement for costly amplifiers.

Any signal format

Direct intensity modulation means the RF signal is transferred from the electrical to the optical domain without frequency conversion or digitization. This results in very low noise and distortion, and means that almost any modulation format can be supported.

- Exceptionally low phase noise performance – suitable for narrowband schemes
- Used for uplinks and downlinks
- The **ViaLite** L-Band link covers 700-2450 MHz
- IF-Band covers 70/140 MHz

Redundancy

ViaLite switch and splitter modules mean a system can be fitted with full redundancy if required.

All **ViaLiteHD** 19" racks are fitted with dual power supplies to ensure reliability of power.

Monitoring and Control

The **ViaLite** SNMP module allows monitoring and control of all module parameters via a web browser.

Multiplexing

To minimize fiber count, **ViaLite** CWDM and DWDM technology allows multiple signals to be transported over a single fiber.



ViaLite's ODE range of weatherproof outdoor enclosures

Long Distance Links

ViaLite is known for its expertise in long distance systems from 100 to 600 km. A range of DWDM products are available including: EDFA, Delay Line, CWDM or DWDM Mux/De-Mux, Optical Switch, Dispersion Compensation Module (DCM).

Long distance systems can be used for link redundancy and site sharing. They can also be used for Ka-Band Rain Fade Diversity, where in poor weather conditions, the signal can automatically be taken from an antenna located at a geographically diverse location (within the satellite's footprint) where the weather is better. This is done without disruption to the data feed and with timing compensation to ensure continuity of service for the user.

Blind Mate

RF modules can be removed and replaced in seconds without the need for any wiring changes. **ViaLite's** SNMP module automatically ensures a replacement card mirrors the settings of its predecessor to make for fast and easy hot-swapping.

8/10 Top Teleports
(WTA report 2020) use **ViaLite**.

Gain Management

ViaLiteHD products allow three methods of gain control:

- AGC (Automatic Gain Control)
- Software control via SNMP
- Hardware control via DIP switches

Wide Dynamic Range

Industry-leading dynamic range means **ViaLite** links offer superb performance over a wide range of input signal levels without the need for time-consuming setup procedures.



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