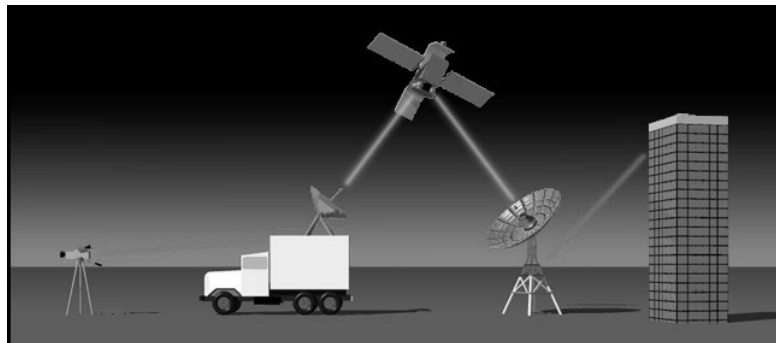


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Application Note: Broadcast Television and Satellite Uplink Connections



Scenario

Outside Broadcast, News Gathering and Satellite Uplinks reporting demand innovative solutions to communications problems – and with today’s all-digital environments, high integrity feeds and very high data rates such as 270Mbps SDI/ASI are often required.

Connecting remote cameras to OB vans, mixing/edit facilities or connecting feeds between difficult-to-access areas and tall buildings creates problems sometimes not well suited to traditional leased-line, fibre-optic, copper cable or microwave links.

CableFree solves the problem with high-capacity, highly reliable wireless solutions with low cost of ownership. CableFree products offer up to Gigabit capacity throughput and are installed in hours, not weeks.

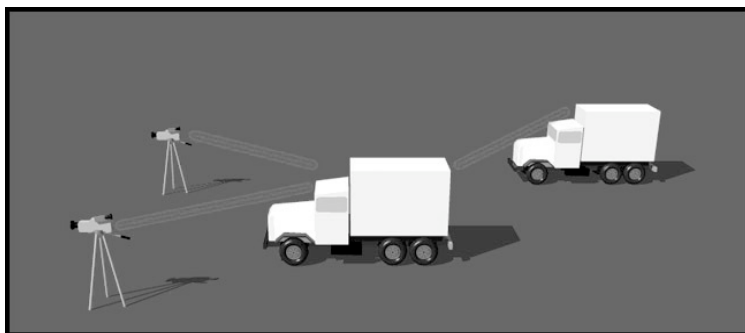
Solution

A CableFree solution offers the following features and benefits:

High performance:	Gigabit Ethernet FSO, 72Mbps radio
Rapid installation:	15 minutes deployable on tripods
Highly reliable:	99.999% availability achievable
License-free Operation:	No fees to pay
No monthly rental fee:	Low maintenance solution
Diverse technology options:	Free Space Optics & Broadband Radio
Fully manageable:	Advanced software tools
Resilient solutions:	1+1 FSO+radio dual link options
Low Total-Cost-of-Ownership (TCO):	Moveable asset
Safe & Environmentally friendly:	Low disruption during installation

CableFree products are field-proven, with thousands of deployments in over 50 countries since 1997. Excellence in performance and reliability are not sacrificed in providing highly competitive priced solutions together with a comprehensive range of support services.

Application Diagram



Two or more vehicles or buildings are connected by CableFree wireless products. Clear Line-of-Sight (LOS) for FSO or Near-Line-of-Sight (NLOS) for radio is required.

The customer data (video, data and/or voice) is connected to the wireless units which can be mounted on tripods, rooftops, towers, poles or behind windows.

For permanent installation a site survey is recommended before installation, to determine suitable mounting points, location of cable runs etc. Installation involves physically mounting the equipment, aligning it, connecting data and power circuits and commissioning.

Recommended Systems

CableFree Access	Connectivity up to 155Mbps, range up to 4km
CableFree 622	Connectivity up to 622Mbps, range up to 2km
CableFree Gigabit	Gigabit Ethernet and Fibre Channel up to 1.5km
LaserHop	E1, Fast and Gigabit Ethernet up to 1km
CableFree HPR	Radio links up to 72Mbps, range up to 40km
CableFree MPR	Radio links up to 30Mbps, range up to 40km

Broadcast standards supported:

- SMPTE259 Serial Digital (SDI) D1 & D2 at 143, 177, 270, 360, 540Mbps
- Analogue Composite Video at 67dB SNR, 9MHz bandwidth
- E3/G.703 34.368Mbps for compressed digital video relay
- E1/G.703 2.048Mbps & E2/G.703 8.448Mbps for audio or data feeds
- ATM-155 & 622, STM-1 & -4 for 155 & 622Mbps networked video feeds
- Multi-channel composite video solutions available

Data formats supported

E1/G703 2Mbps • E2 8Mbps • E3 34Mbps • T1 1.5Mbps • STM-1 & STM-4 •
Ethernet 10, 100 & 1000Mbps • ATM-155 & 622Mbps, Token Ring • FDDI •
Fibre Channel • Broadcast Video and CCTV •
Multiplexed voice and data 10+2 and 100+2 solutions available

For more information, please contact CableFree

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