

# WIRELESS EXCELLENCE

## Application Note

Broadcast Television and Satellite Uplink Connections

Gigabit Wireless Networks



### About Wireless Excellence

Founded in 1995 and with headquarters in Oxford UK, Wireless Excellence Limited is a leading designer and supplier of outdoor and indoor Broadband Wireless communication products.

With a complete range of solutions including Radio, Microwave, Millimeter-Wave, Free Space Optics, WiFi and WiMax solutions, customers in over 60 countries have chosen Wireless Excellence as the “one stop shop” solution of choice for dependable wireless networking.

## 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 and 1.485Gbps HD feeds 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.

Wireless Excellence 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.

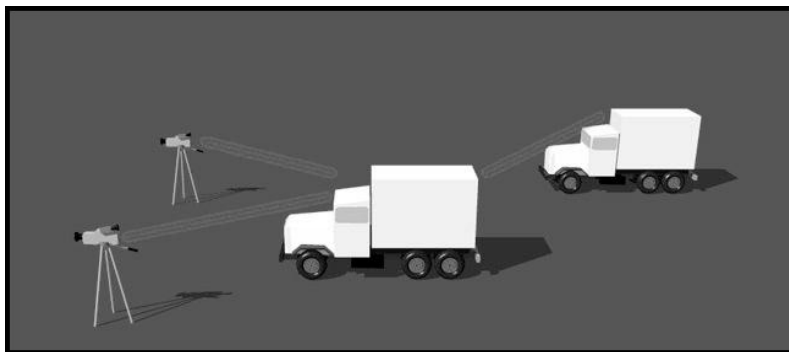
## Solution

A CableFree wireless solution offers the following features and benefits:

High Performance	Gigabit Ethernet (1.25Gbps) on FSO, MMW, and Microwave, 220Mbps on Radio
Rapid installation:	15 minutes deployable on tripods
Highly reliable:	99.999% availability achievable
License-free Operation:	No fees to pay on license free bands
No monthly rental fee:	Low maintenance solution
Diverse technology options:	Complete range of FSO, Broadband Radio, Microwave, MMW, WiFi
Fully manageable:	Advanced software tools
Resilient solutions:	1+1 Hybrid FSO+RF resilient link options
Highly Secure:	Proven inherently secure technologies
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 60 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 Products

CableFree 622	FSO Connectivity up to 622Mbps, range up to 2km
CableFree Gigabit	FSO Gigabit Ethernet and Fibre Channel up to 1.5km
CableFree HPR-MIMO	Radio links up to 220Mbps, range up to 40km
CableFree HPR	Radio links up to 72Mbps, range up to 40km
CableFree MW	Licensed Microwave links up to 1Gbps, range up to 100km
CableFree MMW	60/70GHz Millimeter Wave links up to 1Gbps, range up to 100km
CableFree WiFi	High performance WiFi for indoor and outdoor coverage

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## For More Information

Please contact Wireless Excellence Ltd for information on the complete range of CableFree products and services

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