

VideoWave

a professional answer to wireless transmission

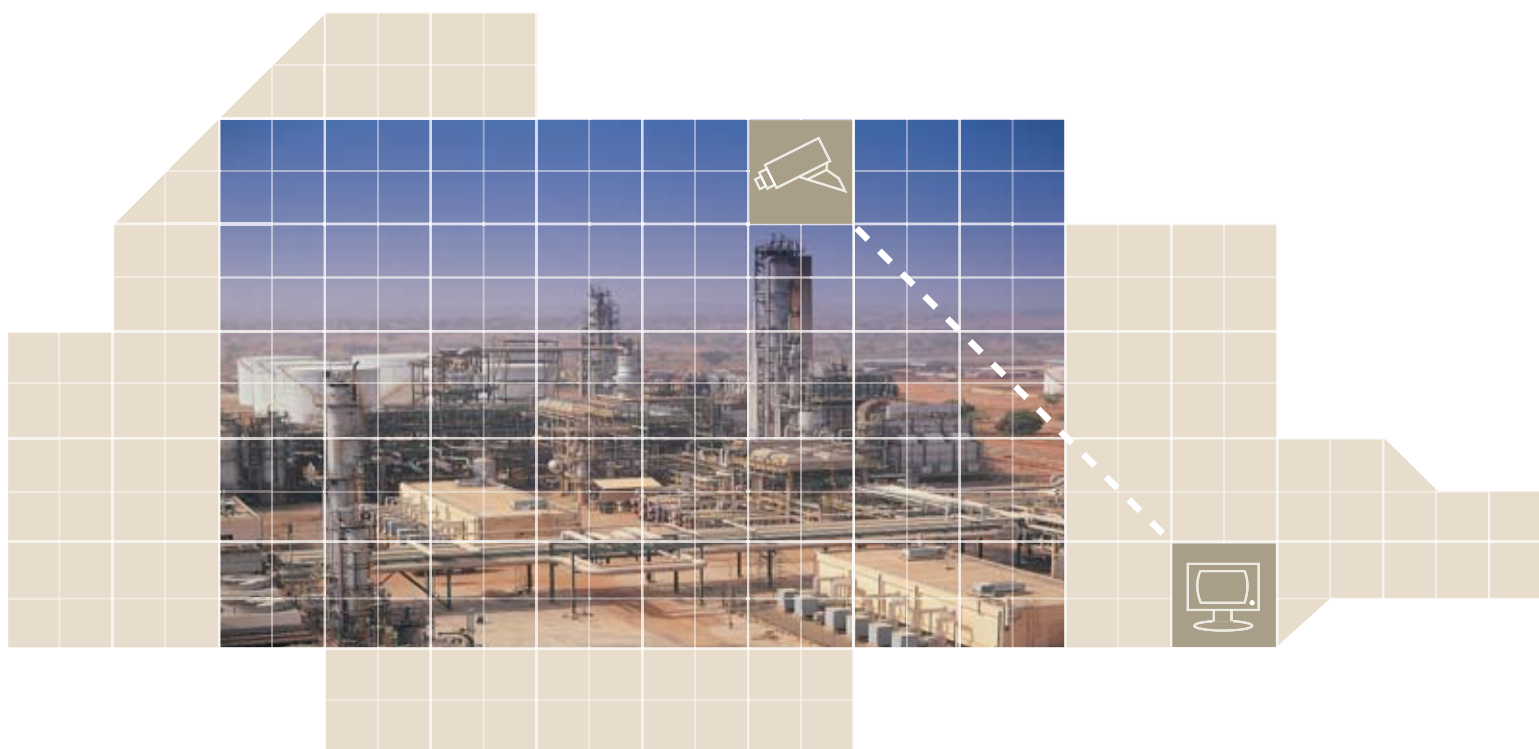
VideoWave is available in 1.4GHz or 2.4GHz versions, approved for license-free use in the UK and internationally. It provides a professional answer to wireless transmission of composite real time video signals using proven video processing technology

(PAL, SECAM and NTSC), with a power output of up to 500mW. VideoWave can also be used in conjunction with our range of modems to offer over air telemetry for full control of PTZ cameras.

Typical applications

- CCTV point-point
- Air to Ground Link*
- Mobile Surveillance
- remote Site Monitoring
- Covert.

* Where regulations allow



VTX / VRX 1.4GHz

The 1.4GHz VideoWave units have been designed specifically for the UK market where this frequency is available license free at an output power of 500mW. Other countries may allow its use but usually at reduced power. The units are small and light, housed in a very robust aluminium extrusion. IP67 rated enclosures giving full weatherproofing for exposed locations are also available. VideoWave may be used with the supplied 1/2 wave whip antenna or with externally mounted antennas for greater distances.



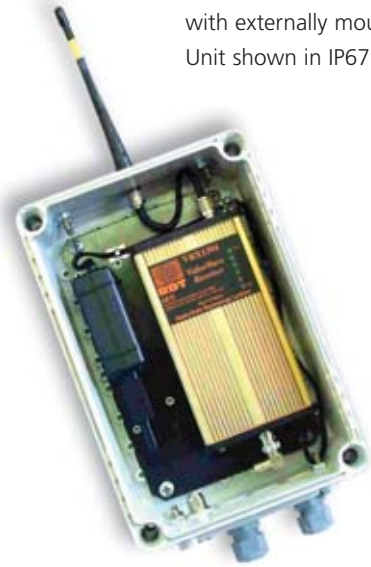
- Up to 500mW output power
- Lightweight robust design
- Signal strength indicator
- Test pattern for set up
- 12V operation
- Optional weatherproof enclosures
- Compliant with R&TTE Directive
- Tested to MPT1349

VTX / VRX 2.4GHz

The 2.4GHz VideoWave has been designed to meet the specifications for license free use throughout Europe. Because of the varying regulations in different countries, it is available with output powers between 10mW and 500mW (factory set). The units are housed in a very robust aluminium extrusion.

IP67 rated enclosures giving full weatherproofing for exposed locations are also available. VideoWave may be used with the supplied 1/2 wave whip antenna or with externally mounted antennas for greater distances.

Unit shown in IP67 enclosure



- 10mW to 500mW output power
- 4 channels available
- Lightweight robust design
- Signal strength indicator
- 12V operation
- Optional weatherproof enclosures
- Compliant with R&TTE Directive
- Tested to ETS 300 440

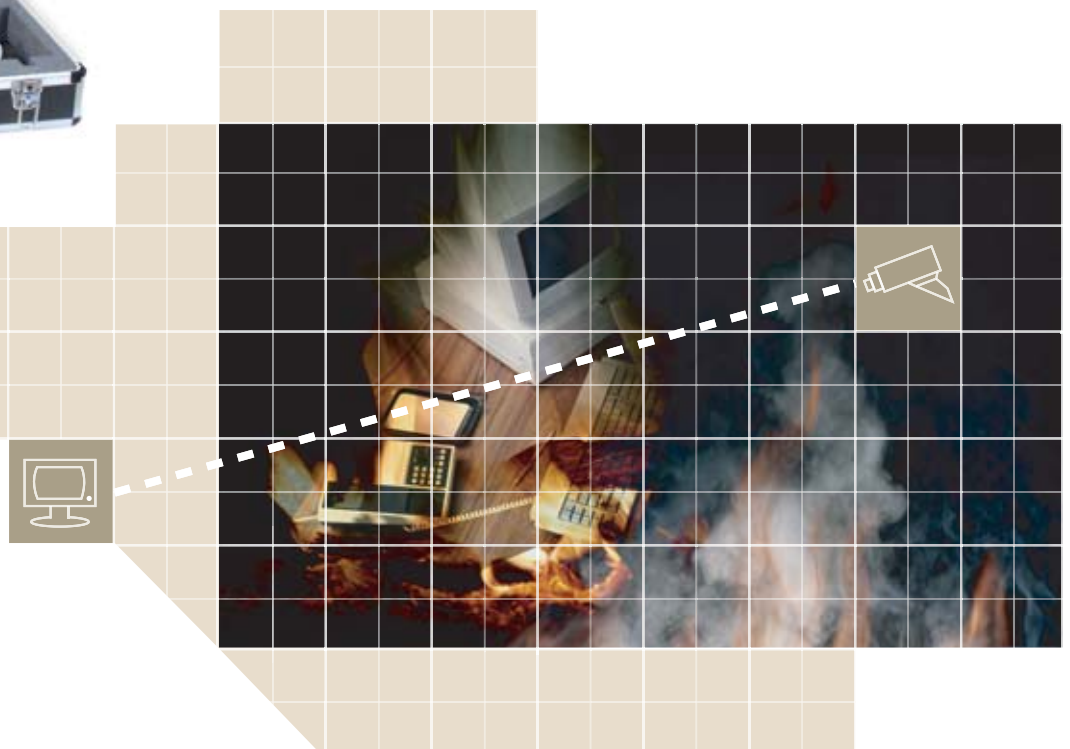


Survey Kit / Covert Operation

RDT can supply a complete portable video transmitter and receiver, with batteries and a LCD monitor housed in a convenient robust carrying case. The kit has a variety of uses particularly for covert operations or temporary installations, but one of its main applications is for carrying out a survey prior to installation. Using the kit, a camera (not supplied) and battery operated transmitter can be placed in the desired location. The receiving unit and LCD monitor can then be used to check reception at the required destination. This can help save wasted and sometimes costly installation time.



- Portable Transmitter & Receiver
- Available in 1.4GHz or 2.4GHz
- 4 inch LCD colour monitor
- Re-chargeable batteries
- Battery charger / power supply
- Mounting brackets
- Whip antennas
- Lockable flight case



2400M VTX Module

The 2.4GHz Transmitter is available as a small module, ideal for incorporating into users own equipment such as a camera housing, or safety equipment. The module is supplied with a flying lead for power and video input, with a SMA connector for the antenna.

- Small size 70 x 50 x 20 mm
- 10mW to 300mW output power
- Compliant with R&TTE Directive
- Tested to ETS 300 440

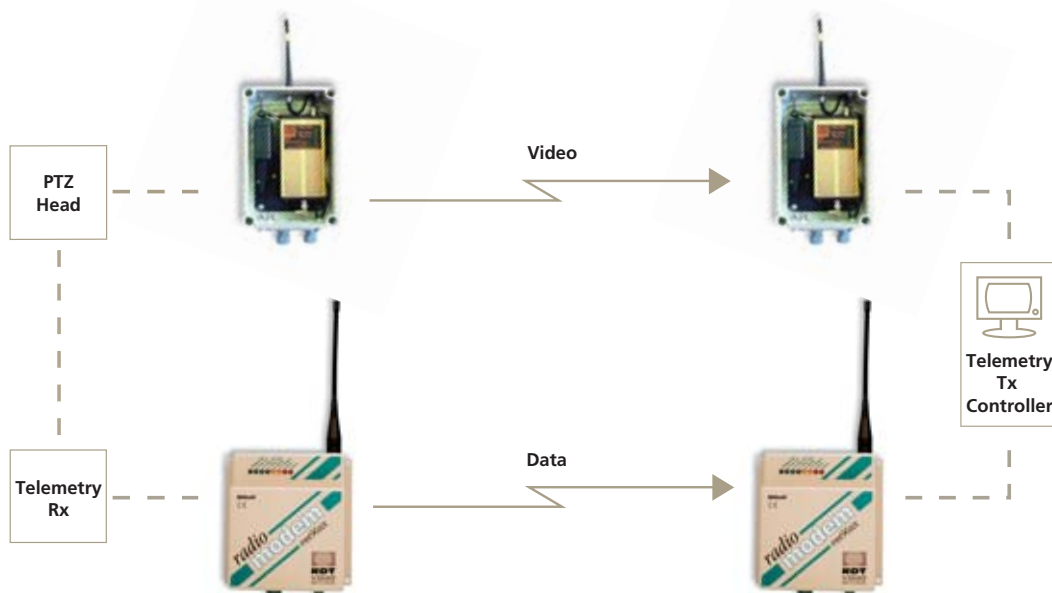
Video and Data for Radio Telemetry

For applications using PTZ cameras, RDT offer the addition of a Radio Modem for complete control of the telemetry functions. This allows the use of all the pan and tilt functions as well as zoom, pre-sets etc. from most of the commercially available video control systems.

The VTXxxxxENCD video transmitter and VRXxxxxENCD video receiver combine the VideoWave (1394MHz or 2400MHz) wireless video transmission system with the RM9600 series radio modem transceiver for remote operation of cameras with telemetry. Units are housed within a weatherproof IP67 enclosure and both top plate and bulk head connections are provided to enable connection to our range of video and data antennas as well as cable entry for video, data and mains power.



- Enables Wireless connection of PTZ and Dome cameras
- License exempt operation
- 1394MHz and 2400MHz versions available
- Compatible with most major telemetry types using RS485 or RS232
- Wide range of antennas available for up to 3Km range



Application showing Point to Point configuration

The above diagram shows an example of a typical single camera point to point system. The RM9600 series Radio Modem can interface to most of the commonly available video controllers and telemetry receivers. Our technical support department can advise on the compatibility of any control equipment.



Antennas

A selection of antennas is available suitable for most applications depending on location and required coverage range. The distances achieved vary greatly with each installation,

the surrounding terrain, buildings etc. so the figures quoted below are a general guide and assume a reasonably clear 'line of sight' between transmitting and receiving antenna.

| 1.4GHz | | | 2.4GHz | | | | | |
|---------|------------------------------|--------------|---------|---------------------------------|-------|-------|-------|--|
| Antenna | Type | 500mW output | Antenna | Type | 10mW | 25mW | 500mW | |
| ANT003 | 1/2 Wave Whip | 750m – 1500m | ANT024 | 1/2 Wave Whip | 600m | 800m | 1000m | |
| ANT004 | Magnetic Mount | 750m | ANT025 | Dipole | 800m | 1000m | 1200m | |
| ANT005 | Dipole | 1 – 2 Km | ANT026 | Corner Reflector (10dB gain) | 1000m | 1200m | 1500m | |
| ANT007 | Shrouded Yagi (14dB gain) | up to 5km | | | | | | |

Weatherproof Enclosures

RDT offer a range of IP67 rated enclosures for external use, which provides a complete weatherproof installation to suit most conditions. There are two sizes available; a single enclosure to house a Video Transmitter or Receiver, together with its power supply; a double enclosure that houses the Video

unit, a Radio Modem and power supply. Both enclosures have antenna connectors and cable glands to take the required cabling.

Single enclosure 280h x 190w x 130d (mm)

Double enclosure 280h x 280h x 130d (mm)

Technical Specifications

| SPECIFICATIONS 1.4GHz | | | | |
|-----------------------|-------------------------|--|-------------------------|-----------------|
| General | | | Radio | |
| Video Input: | 1 Vp-p into 75_ BNC | | Frequency: | 1394 MHz |
| Video Output: | 1 Vp-p into 75_ BNC | | Frequency stability: | +/- 40 KHz |
| Pre-emphasis: | CCIR PAL 405-1 | | RF Output Power: | 500 mW |
| Operating Voltage: | 10 – 15 V dc | | Local Oscillator: | PLL Synthesised |
| Protection: | Reverse polarity | | Modulation type: | FM |
| Current consumption: | | | Modulation Bandwidth: | 4.5 MHz |
| VTX 1.4 GHz | 450mA | | Spurious and Harmonics: | to MPT 1349 |
| VRX 1.4 GHz | 250mA | | | |
| Antenna connector: | SMA | | Mechanical | |
| Power connector: | 2.1mm Jack | | Dimensions: | 125 x 65 x 30mm |
| Indicators: | | | Weight: | 240g |
| Red LED | Power On | | Operating temperature: | -5 to +55oC |
| Red / Green LED | Video / Signal strength | | | |

| 2.4 GHz | | | | |
|-----------------------|-------------------------|--|-------------------------|-------------------|
| General | | | Radio | |
| Video Input: | 1 Vp-p into 75_ BNC | | Frequency: | 2400 – 2483.5 MHz |
| Video Output: | 1 Vp-p into 75_ BNC | | Frequency stability: | +/- 40 KHz |
| Pre-emphasis: | CCIR PAL 405-1 | | RF Power Output: | 10 – 500 mW |
| Operating Voltage: | 10 – 15 V dc | | Local Oscillator: | PLL Synthesised |
| Protection: | Reverse polarity | | Modulation type: | FM |
| Current Consumption: | | | Modulation Bandwidth: | 4.5 MHz |
| VTX 2.4 GHz | 560mA | | Spurious and Harmonics: | to ETS 300 440 |
| VRX 2.4 GHz | 270mA | | | |
| Antenna Connector: | TNC | | Mechanical | |
| Power Connector: | 2.1 mm Jack | | Dimensions: | 160 x 90 x 55mm |
| Indicators: | | | Weight: | 560g |
| Red LED | Power | | Operating temperature: | -5 to +55oC |
| Red, Amber, Green LED | Video / Signal strength | | | |

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