



BritLink R1000

COFDM Wireless Digital Video Surveillance System

Features

- Provides Superior Performance in Multipath Environment
- Resistant to Interference
- MPEG2 Video, up to 20 Mbit/S
- Data Transmission and NICAM Stereo Audio
- COFDM – Technology used in DVB-T
- Indoor and Outdoor Use
- Antenna Diversity Receiver
- Compact and Light Weight Design
- AES: Encryption and Scrambling for Additional Security
- Easy Installation: Plug and Play, any PAL/NTSC Camera and Monitor

Applications

- Wireless point-to-point surveillance links with high quality video and stereo audio.
- Wireless digital fixed and mobile video surveillance for:
 - Traffic, tunnels, public places and buildings
 - Arenas, stadiums, theatres, festival, airports, ports, container terminals
 - Historical and archaeological sites
 - Rescue operations e.g. earthquakes, fires and accidents (tunnels)
 - Law enforcements, e.g. police operations, prison surveillance, border control
- Low cost TV production, mobile or fixed e.g. LIVE sports events, talk shows
- High speed video, voice and data transmission in multi-path environment
- Point-to-multipoint video transmission
- Transmission of seminars to remote areas from schools or universities

Options

R1000 may work independently of the electricity network by means of solar power. As an option, up to 4 cameras may be connected to one transmission link. With minimal effort, mobile use of the system with perfect transmission quality, covering a range up to 5000m can be achieved. 25km with fixed installed transmission routes are possible.

System Parameters

Video

Compression Standard:	MPEG 2 with non DVB modes
Chrominance Profile:	4:2:0
Format:	PAL or NTSC
Specification:	Rec. ITU_R BT. 470-4
Line Standard:	625 (PAL) or 525 (NTSC)
Horizontal Resolution:	704 pixel
Vertical Resolution:	576 at 625 lines or 480 at 525 lines (depending on line standard)
Frame Rates:	25 (PAL) or 29.97 (NTSC)
Video Bit Rates:	1 to 20 Mbit/s
End-To-End Delay:	40ms
Frequency Responses:	20Hz to 12kHz, ± 0.25 dB
Signal/Noise-Ratio:	>60dB RMS
Crosstalk:	>55dB
THD:	<0.1%

Audio

Bitrate:	728 kbit/s
Compression Standard:	NICAM
Sampling Frequency:	32 kHz

Data

Format:	RS232
Max Bitrate:	38400 baud

FEC

Guard Interval:	1/32, 1/16, 1/8 or 1/4
Output Level:	1 v p-p
Impedance:	75 Ω

General

Tunability:	1 MHz
Bandwidth:	Selectable 6,7 or 8 MHz
Modulation:	COFDM 2k carriers, using QPSK or 16QAM 1/2 2/3 or 3/4

Receiver (R1000-2.4 RX)

General:	Antenna diversity input
Down Converter:	L.O.F. 1.700 at 1.3; 1.880 at 2.4
Receiver Sense Limit:	94 dBm
Receiver Overload Limit:	-10 dBm
Video Format:	Analogue composite (FBAS)
Video Output Level:	1 vpp, $\pm 10\%$
Video Impedance:	75:
Audio Format:	Analogue stereo, unbalanced 725 mV, $\pm 10\%$
Control Format:	Low
Power Supply:	RS 232, 9600 baud ON/OFF switch with LED special control protocol
Power:	12 vdc (8-14v)
Power Consumption:	18W
Connectors:	Lemo 2-pole
Video:	BNC
Audio:	Lemo 4-pole
Data/Control:	Lemo 6-pole
Antenna Input:	N
Housing:	Powder-coated aluminium, black RAL 9005
Dimensions:	222mm x 169mm x 82mm (without connectors)
Weight:	Approximately 2200g
Operation Temp:	-10°C to +40°C

Transmitter (R1000-2.4 TX10)

RF Output:	10mW (+10 dBm)
Impedance:	50:
Spurious Emissions:	>50 dBc
Frequency Stability:	>25 ppm
Video Format:	Analogue composite (BAS)
Video Input Level:	1 vpp, ±10%
Video Impedance:	75:
Audio Format:	Analogue stereo, unbalanced
Input Level:	725 mV, ±10%
Clip Level:	12 dBm
Impedance:	High
Control Format:	RS 232, 9600 baud
Protocol:	Special control protocol
Power Supply:	ON/OFF switch with LED
Power:	12 vdc (8-14v)
Power Consumption:	12W active, 2W sleep mode
Connectors:	Lemo 2-pole
Video:	BNC
Audio:	Lemo 4-pole
Data/Control:	Lemo 6-pole
RF Output:	TNC
Housing:	Powder-coated aluminium, black RAL 9005
Dimensions:	216mm x 106mm x 32mm (without connectors)
Weight:	Approximately 600g
Operation Temp:	-10°C to +40°C

Power Amplifier (R1000-2.4PA1000)

RF Input:	10 mW (10 dBm)
RF Output:	1000mW (30 dBm)
Impedance:	50:
Power Supply:	ON/OFF switch with LED
Power:	12 vdc (8-14v)
Power Consumption:	12W
Connectors:	Lemo 2-pole
RF Input:	TNC
RF output:	TNC
Housing:	Powder-coated aluminium, black RAL 9005
Dimensions:	216mm x 82mm x 322mm (without connectors)
Weight:	Approximately 650g
Operation Temp:	-10°C to +40°C