

VidOlink Ranger



VidOlink Ranger Description:

The VidOlink Ranger is a highly portable broadcast grade MPEG 4 COFDM HD wireless camera transmission link capable of providing high quality video at distances over a mile line of sight*.

Demanding videographers choose the VidOlink Ranger when they require the highest quality video without breakup or pixilation. The VidOlink Ranger comes in a portable package and is designed to give the operator the ability to set up quickly and cover wide areas with long range wireless transmission. The kit includes a transmitter, receiver, antennas and all the accessories chosen specifically to optimize the total system performance.

At the heart of the VidOlink Ranger system is the VidOlink Ranger transmitter whose size and performance make it ideal for sports, live news gathering, reality-based programs, ENG-EFP/OB, point-of-view and any type of live event coverage. The VidOlink Ranger transmitter now comes in three camera mounting options: Anton Bauer, V-lock and Hot-Shoe. The VidOlink Ranger has a friendly local graphical user interface.

Twelve easily selected presets make it simple to change channels and other operating parameters on the fly. The Windows-based graphical user interface simplifies preset programming.

The VidOlink Ranger receiver is a dual diversity COFDM receiver that uses maximal-ratio combining technology to enable the VidOlink system to support Line-of-Sight (LOS) as well Non-Line-of-Sight (NLOS) applications. The VidOlink Ranger receiver features MPEG-4/ MPEG-2 auto-detect video and embedded audio decoding. This technology provides a highly reliable decode solution in demanding portable applications.



VidOlink Ranger Long Range COFDM Wireless Video Link

Key Features:

- Up to one mile line-of-sight range
- HD and SD encoding / decoding
- Up to 200mW RF output power
- Anton Bauer, V-Lock or Hot Shoe mounting
- Broadcast quality video
- MPEG-4 H.264 Part 10 encoding
- MPEG 2/4 auto detect decoding on receivers
- Embedded Audio
- ASI Output
- Very low power consumption
- Video, audio and telemetry data
- User-friendly controls
- Wide selection of antennas
- Optional Range Booster Amplifier
- Encryption BCRYPT 1 & 2 AES 128 or 256

Developed for the new generation of HD capable compact cameras, the VidOlink Ranger system is available in the 2, 5.8 and 7GHz bands, features H.264 SD and HD encoding and operates in the standard 2k DVB-T COFDM mode.

**Many factors affect the operational distance including but not limited to interference and physical environmental obstructions.
Further range is also possible with a more directional antenna, change in frequency and power.

Specifications

Standby Mode

Standby	No RF output
Normal	Instant on frequency

Modulation

Modulation Formats	COFDM (DVB-T)
Carriers	2k
Constellation	QPSK, 16 QAM
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval	1/32, 1/16, 1/8, 1/4
Bandwidth	6 MHz, 7 MHz, 8 MHz
Receiver Diversity Channels	2 input max ratio comb.

MPEG Encoder/Decoder

Method	MPEG-4 Part 10/H.264
Coding	AVC
Video Input	Composite, HD/SD SDI
	NTSC: 720 x 480 (4:2:0)
	PAL: 720 x 576 (4:2:0)

GOP Settings

Low latency - Intra Refresh P
Simple - IP15
Advanced - IPB
Long GoP - IPB

Formats

HD (4:2:0)	720p: 23.98/24/50/59.94/60 1080i: 50/59.94 1080p: 23.98/24/25/30/29.97
------------	--

SD(4:2:0)

1080psf: 23.98/24/25/29.97
NTSC: 720 x 480
PAL: 720 x 576

Audio

Audio Coding	MPEG 1 (Layer I or II)
Audio Sample Rate	48 kHz
Transmitter Channels	2 Stereo, 4 Mono Standard
Transmitter Audio Input	Embedded
Receiver Audio Channels	1 Stereo or 2 Mono Standard
Receiver Audio Output	1VP-p single end into 10k ohm
Receiver Embedded Channels	4
Receiver Embedded output	SDI

Power Requirements

Input Range	DC: +9 to +28
Power Consumption	See tables

System

Video Preset	Remote Standby/Test Generator Selectable
ASI Output	Audio output rate follows modulation or fixed selected output (PCR time stamp)
Latency	Under 4 frames for I and p formats Under 5 frames for psf formats
Test Gen (Dynamic)	SMPTE-CB(NTSC)/100%, CB (PAL) 1 KHz Tone/Pulse
Encryption (Optional)	BCRYPT1 and 2, 128 and 256bit

User Data

Remote Control	RS232 300-155k Baud RS232
ASI In	5 pin Lemo
ASI Out	5 pin Lemo
Local Control	Push Button
Preset through GUI	16 user configurable presets

Environmental

Temperature Range	-10° to +50°C ambient
Storage	-40° to +80°C

Physical Characteristics

Size of Receiver	1.5"H x 2.7"W x 5"L
Volume of Receiver	28 cubic inches
Weight of Receiver	1.4 lbs.
See outlines for TX	

Optional TX Range Booster

Power Output	1 Watt
Frequency	1980 – 2700 MHz
Power Input	50 – 250mW
Transmit	Auto detect w/ input power
Operating Voltage	+9 to 30VDC
Voltage Input	6 pin Lemo to P or D tap RF Input center conductor (Bias-T)
Temperature Range	-10° to +50°C Ambient
Size	4.5" L x 2.5" D
Power Consumption	Transmit 15 Watts Standby < 1 Watt



VIDOVATION
Moving Video Forward

www.vidovation.com

Toll Free: 1.855.VidOvation

Tel: 949.777.5435

E: sales@vidovation.com

ORDERING INFORMATION

Transmitters

VLK-RA-2.3G-T-200	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 1.980 to 2.500 GHz with 200mW/23dBm RF power
VLK-RA-2.4G-T-25	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 2.400 to 2.483 GHz with 25mW/14dBm RF power
VLK-RA-2.4G-T-200	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 2.400 to 2.483 GHz with 200mW/23dBm RF power
VLK-RA-2.6G-T-200	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 2.400 to 2.700 GHz with 200mW/23dBm RF power
VLK-RA-5.6G-T-100	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 5.600 to 6.000 GHz with 100mW/20dBm RF power
VLK-RA-5.8G-T-100	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 5.725 to 5.850 GHz with 100mW/20dBm RF power
VLK-RA-5.8G-T-25	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 5.725 to 5.850 GHz with 25mW/14dBm RF power
VLK-RA-6.4G-T-100	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 6.425 to 6.525 GHz with 100mW/20dBm RF power
VLK-RA-6.8G-T-100	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 6.425 to 7.125 GHz with 100mW/20dBm RF power
VLK-RA-7.0G-T-100	VidOlink Ranger Long Range COFDM HD Wireless Video Link Transmitter at 6.800 to 7.150 GHz with 100mW/20dBm RF power

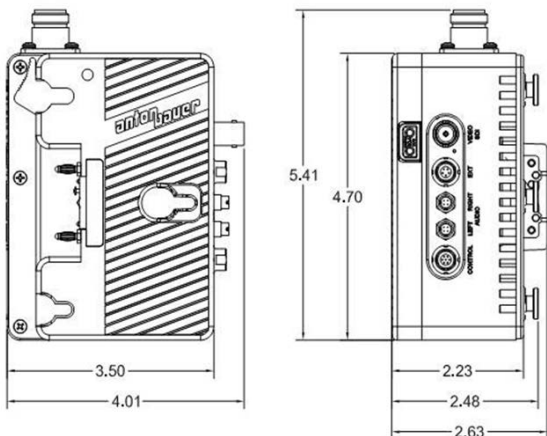
Receivers

VLK-RA-2.3G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 1.980 to 2.500 GHz
VLK-RA-2.4G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 2.400 to 2.483 GHz
VLK-RA-2.6G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 2.400 to 2.700 GHz
VLK-RA-5.6G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 5.600 to 6.000 GHz
VLK-RA-5.8G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 5.725 to 5.850 GHz
VLK-RA-6.4G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 6.425 to 6.525 GHz
VLK-RA-6.8G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 6.425 to 7.125 GHz
VLK-RA-7.0G-R	VidOlink Ranger Long Range COFDM HD Wireless Video Link Receiver at 6.800 to 7.150 GHz

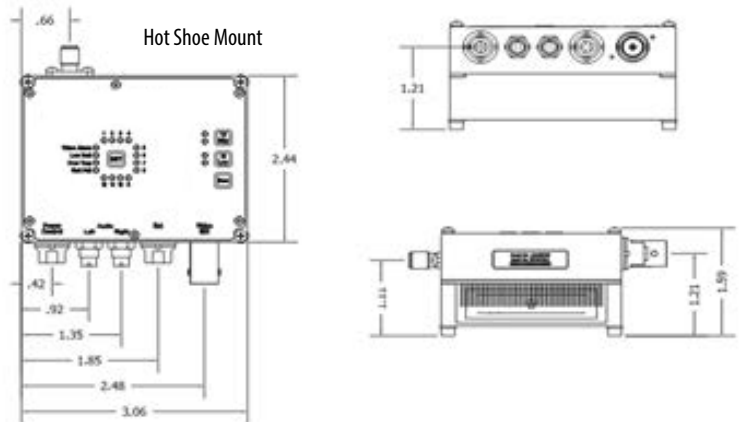
Mounts

VLK-RA-AB	Anton Bauer Mount
VLK-RA-VL	V-Lock Mount
VLK-RA-HS	Hot Shoe Mount

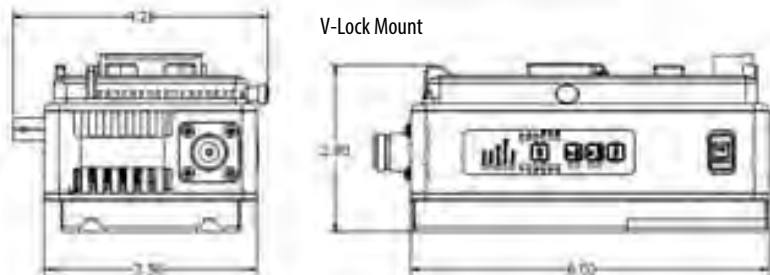
Anton Bauer Mount



Hot Shoe Mount



V-Lock Mount



VIDOVATION
Moving Video Forward

www.vidovation.com Toll Free: 1.855.VidOvation Tel: 949.777.5435 E: sales@vidovation.com