

# SENSPEX

APPLIED SCIENCE & TECHNOLOGY

## V14 HD Camera System

Stabilized Airborne Camera Systems



The V14 HD is a multi-axis coordinated, gimbal-controlled, color camera system that provides layered isolation, steering and fine correctional movements to stabilize a wide selection of precision optics to a sub-pixel level.

The system's capture device, the Sony HDC-1500 1080p professional broadcast camera, provides true scene fidelity with unmatched color clarity and resolution in multiple HD and SD sample rates. The camera system is available with extreme standoff lenses that extend to an unrivaled 1760mm of focal length or conversely wide angle lenses for cinematography applications. The V14 HD is the only gyro-stabilized camera system to enable the user to interchange lens options at leisure, allowing a single system to serve multiple and distinctive applications. The V14 HD surpasses the competition by allowing a greater degree of freedom with outstanding range of coverage and integration flexibility. The V14 HD's ability to traverse throughout a greater range of elevation and roll offers increased performance in highly dynamic applications that demand an expanded field of regard. The V14 HD's advantages of extended range, multiple lens configurations, greater coverage and lightweight make it the ideal solution for remote monitoring applications.

[www.senspex.com](http://www.senspex.com)

### FEATURES

- 5-axis Stabilization
- 1080p Resolution
- Interchangeable Lens Options
- Compact Size and Weight
- Ergonomic, User Friendly Design

### BENEFITS

- High definition color imagery for day and lowlight operations
- Sub-pixel stabilization
- Includes the latest hyper-gamma and hyper-gain software advancements
- Ability to interchange between different lens options in the field
- Versatile, lightweight, compact and rugged
- Easy accessibility to control functions during flight operations

# V14 HD Gyro-Stabilizer

## HD Daylight Sensor

Camera	Sony HDC-1500
Sensor Type	3-CDD 2/3"
Effective Pixels	1920(H) x 1080(V)
Aspect Ratio	16:9
Frame Rates	1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P, NTSC/PAL
Spectrum System	F1.4 prism system
Built in Filters	1: Clear, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND, 5: 1/64ND A: Cross, B: 3200K, C: 4300K, D: 6300K, E: 8000K
Servo Filter Control	Yes
Sensitivity	F10 at 2000 lx (3200k, 89.9%) reflectance
Signal-To-Noise Ratio	54dB (typical)
Horizontal Resolution	1000 TV lines

## Lens Options

The camera system can be adapted for multiple lens configurations upon request.

Angènieux™ 40 x 22*	(22mm to 1760mm optical, 3520mm digital)*
Fujinon™ HA 42 x 13.5	(13.5 mm to 1134mm optical, 2268mm digital)
Fujinon™ HA 42 x 9.7	(9.7mm to 815mm optical, 1630mm digital)
Fujinon™ HA 22 x 7.8	(7.8mm to 343mm optical, 686mm digital)
Fujinon™ HA 13 x 4.5	(4.5mm to 117mm optical, 234mm digital)

\*Note – Non-interchangeable lens option

## System Specifications

System Type	5-axis gyro-stabilized
Azimuth Coverage	360° Continuous
Elevation Coverage	+20° to -195°
Roll Coverage	+/- 45°
Slew Rate	>55°/sec*
Max Slew Acceleration	100°/sec <sup>2</sup>

\*Angènieux Lens Option Slew Rate <35°/sec

## Dimensions

Turret	19.5" x 14.9"
Lens Enclosure	8.5" (D) x 0.5" – 7.5" (L)
Auxiliary Control Unit	14" x 19" x 6"
Laptop Control Unit	17" x 8.75" x 1.8"
Cable Set	20' length

## Weight

Turret	65-74 lbs.
Lens Enclosure	N/A
Auxiliary Control Unit	27 lbs.
Laptop Control Unit	5 lbs.
Cable Set	9 lbs.

## Power

Input Voltage	28 VDC +/- 10%
Power – Quiescent	85 Watts
Power – Continuous	170 Watts
Power – Transient	230 Watts

## System Interfaces

Digital Serial	RS-232/422
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## Incorporated Camera Accessories

Sony HKC-T1500	Block Extension Adaptor
Sony RM-B750	LCD touch-panel screen

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