

UV Detection Camera

Item	Specifications
Combined Output	
Video standard	PAL or NTSC
Optical channels	UV and visible channels overlaid
Focus	Automatic and manual
Focus distance	2 meters to infinity
Ultraviolet Channel	
UV sensitivity	3×10^{-18} watt/cm ²
Wavelength	240 - 280 nm
Sunlight rejection	Absolute
Visible Channel	
Field of view	Synchronized with UV channel
Fields of view	16° / 8° / 4°
Video Signal	Composite

Digital Still Frame Camera

Item	Specifications
Image Capture Device	1/1.7-inch type Charge Coupled Device (CCD)
Number of Pixels	Approx. 14.7 Megapixels
Image Format	JPEG
Maximum aperture	f/2.8 (W) - f/4.5 (T)
Focal length	40 - 140 mm (35 mm film equivalent)
Digital Zoom	4 x
Auto Focus System	TTL
Remote control	Via software installed in the Data Acquisition Pack

7" Operator Monitor

Item	Specifications
Inputs	Video Composite: BNC, HD-SDI: BNC
Screen size	6" x 3.5"
Matrix	LED-backlit LCD
Resolution	1024 x 600 (16:9)
Viewing angle	170° horizontal, 170° vertical
Contrast	800:1
Brightness	400 cd (center)
Dimensions	8.4" x 5.2" x 1.36"

Video Recorder

Item	Specifications
Compression	H.264
Storage device	SD Flash Cards
Video Input	Composite and HD-SDI
Number of Video Inputs	Composite: 3, HD-SDI 1
Bitrate	Up to 32 mbps
Dimensions	4.98" x 2.83" x 1.34"
Weight	1.33 lbs

Gimbal (TCU)

Item	Specifications
Turret size	13.8" dia. x 18.8" h
Number of stabilized axis	4 axis, 2 inner and 2 outer
Weight	58 lbs
Power requirements	+22 to +30 VDC, < 150 W. On board power aircraft input
AZ coverage	360 degrees continuous
EL coverage	+68°F to -184°F
Slew rate	Up to 60°/s
Acceleration	>300°/s
Temperature /storage)	-40°F to +122° F
Temperature (functional)	-40° F to +104° F
Altitude (funtional)	25000 ft
Aircraft speed	160 knots

External Electronics

Item	Dimensions (W x H x D)	Weight (lbs, typical)
Remote Controller (HCU)	5.7" x 1.7" x 8.7"	7.14
IFU	9.84" x 3.93" x 9.84"	9.5
GPS (Garmin 16 HVS)	9.1 (dia.) x 4.2 (h) cm w/5 m cable	0.79
On-board PC	13.26" x 1.7" x 9.3"	5.5
Main Cable Set	3.5 m length	5.5

Color TV Camera

Item	Specifications
Sensor type	1 / 2.8" Exmor CMOS
Number of Pixels	Approx. 3.27 Mega pixels
Signal to Noise Ratio	>50 dB
Zoom	20 x continuous optical zoom
Horizontal Field of view	1080p/30 mode: 55.4° (wide) to 2.9° (narrow) 720p/60,30 mode: 37.6° (wide) to 1.95° (narrow)
Digital zoom	2 x
Aperture	F1.6 to F3.5
Focus	Motorized-Auto an manual
Gain- Brightness	automatic or manual through electronic shutter speed
Minimum Illumination	1.7 lux (typical) at 50 IRE
Video output	HD-SDI* and composite

Infrared Camera

Item	Specifications
Detector size	640 x 480 pixels
Detector technology	Focal plane array, uncooled microbolometer
Spectral wavelength	7.5 - 13 μ m
Temperature ranges	-40° F to +2732° F
Accuracy	\pm 1°F or \pm 1%
Sensitivity	30mK @ 86°F
Frame rate	25Hz (PAL) or 30Hz (NTSC)
Fields of view	12° (H) x 9° (V)
Focus	Manual and Automatic (one shot)
Electronic zoom	2 x
Video signal	Composite