

# FLIR Corona 350 System (Overview Technical Specification)

## 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	62lbs (28.1Kg)
Power requirement	+22 to +30VDC, < 150 W. On board power aircraft input
AZ coverage	360 degrees continuous
EL Coverage	+20° to -120°
Acceleration	>300o/s <sup>2</sup>
Slew rate	> 60o/sec
Temperature (Storage)	-40oF to 122oF / -40°C to +50°C
Temperature (Functional)	-40oF to 104oF / -40°C to +40°C
Altitude (Functional)	25,000 Feet
Aircraft (Speed)	160 knots

## Corona UV Camera

Item	Specifications
<b>Combined Output</b>	
Video Standard	PAL or NTSC
Optical Channels	UV and Visible Channels Overlaid
Focus	Automatic and Manual
Focus distance	2 meters to infinity
wavelength	3 x 10-18 watt/cm <sup>2</sup>
Sunlight rejection	Absolute

## Visible Channel

Field of View	Synchronized with UV Channel
Fields of View	160 / 80 / 40
Video Signal	Composite

## Infrared Thermography Camera

Item	Specifications
Detector size	640 X 480 pixels
Detector technology	Focal plane array, uncooled micro bolometer
Spectral wavelengths	7.5 – 13 um
Temperature range	-40o F to +2732oF
Accuracy	-+ 1oF or +-1%
Sensitivity	30mK @ 30°C / 86oF
Frame rate	25Hz (PAL) of 30Hz (NTSC)
Field of view	12° (H) x 9°(V)
Focus	Manual and Automatic (one shot)
Electronic zoom	2x
Video Signal	Composite

## High Resolution Digital Still Camera

Item	Specifications
Image Capture Device	1/1.7" 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 equipment)
Digital Zoom	4x
Auto Focus System	TTL
Remote control	Via software installed in the Data Acquisition Pack

## HDTV Video Camera

Item	Specifications
Sensor type	1/3" EXMOR CMOS
Number of Pixels	Approx. 3.27 Mega pixels
Signal to Noise Ratio	>50 dB
Zoom	20x 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	2x
Aperture	F1.6 to F3.5
Focus	Auto or manual
Gain - Brightness	Automatic or manual
Minimum Illumination	1.7 lux (typical) at 50 IRE
Video Output	HD-SDI and Composite

## 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

## 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	1700 Horizontal, 1700 Vertical
Contrast	800:1
Brightness	400 cd (Center)
Dimensions	8.4" x 5.2" x 1.36"