

Hybrid Thermal Intelligent Camera Series



Security Solutions by Design



This series features extended-range infra-red laser illumination coupled with a long-range visible-light camera. An integrated Thermal Imaging camera provides the ability to detect threats even in zero-visibility conditions. Patent-pending independent smart-laser technology allows users to control the concentration, scatter, and direction of the light array ("Searchlight Technology"), which is also capable of glass penetration. Paired with Aventura's video content analytics and C4 Management Platform this provides the ultimate long-range enterprise perimeter surveillance solution.

Features

- Visibility in pitch darkness, fog, smoke, dust
up to 7,500 meters day light and 7,000 meters night mode
- Independently Zoom IR Laser From Visible-Light camera
- Subject Identification / Sees Through Glass
- Wide-Dynamic-Range / Thermal Imagery
- Auto-Tracking
- Rugged Construction / IP66

AVENTURA HYBRID INTELLIGENT CAMERA SYSTEMS

MODEL	CAM-HYB-1000	CAM-HYB-2000	CAM-HYB-3000	CAM-HYB-3000MP
PHOTO				
CAMERA				
Style	Long-Range Laser/Thermal Night Vision PTZ camera	Long-Range Laser/Thermal Night Vision PTZ camera	Long-Range Laser/Thermal Night Vision PTZ camera	Long-Range Laser/Thermal Night Vision PTZ camera
Signal System	NTSC/PAL	NTSC/PAL	NTSC/PAL	NTSC/PAL
Image Sensor	1/2" Infrared Enhancement CCD	1/2" Infrared Enhancement CCD	1/2" Infrared Enhancement CCD	1/2" Infrared Enhancement CCD
Number of Total Pixels	Aprx. 440,000	Aprx. 440,000	Aprx. 440,000	2 Megapixel
Horizontal Resolution	600 TVL	600 TVL	600 TVL	1080p
Lens	17mm (wide) to 374mm (tele)	30mm (wide) to 750mm (tele)	12.5mm to 750mm (1500mm w/ x2 extender)	16.7mm to 1000mm (2000mm w/ x2 extender)
Optical Zoom	22x	25x	60x	60x
Field of View	12° (wide end) to 0.8° (tele end)	6.9° (wide end) to 0.2° (tele end)	16° (wide end) to 0.1° (tele end)	12° (wide end) to 0.1° (tele end)
Minimum Illumination	0.02 lux (color), 0.0009 lux black white	0.02 lux (color), 0.0009 lux black white	0.02 lux (color), 0.0009 lux black white	0.02 lux (color), 0.0009 lux black white
THERMAL				
Thermal Lens	20~100mm	45~135mm	75~150mm	75~150mm
Thermal Sensor	640x480 pixel resolution 4th Generation uncooled VOx FPA detector High Sensitivity NETD ≤ 35mk	640x480 pixel resolution 4th Generation uncooled VOx FPA detector High Sensitivity NETD ≤ 35mk	640x480 pixel resolution 4th Generation uncooled VOx FPA detector High Sensitivity NETD ≤ 35mk	640x480 pixel resolution 4th Generation uncooled VOx FPA detector High Sensitivity NETD ≤ 35mk
LASER				
Effective Distance	1500m daylight, 1000m night mode	3500m daylight, 2000m night mode	5000m daylight, 3000m night mode	5000m daylight, 3000m night mode
Laser Power	Dual circuit drive, regulated voltage and current, power up 1s, photosensitive outside control	Dual circuit drive, regulated voltage and current, power up 1s, photosensitive outside control	Dual circuit drive, regulated voltage and current, power up 1s, photosensitive outside control	Dual circuit drive, regulated voltage and current, power up 1s, photosensitive outside control
Laser Lens	22x 50 mm laser telephoto lens f2.0, multilayer plating near infrared, laser coupling >95%	25x 50 mm laser telephoto lens f2.0, multilayer plating near infrared, laser coupling >95%	60x 100 mm laser telephoto lens f2.0, multilayer plating near infrared, laser coupling >95%	60x 100 mm laser telephoto lens f2.0, multilayer plating near infrared, laser coupling >95%
Laser Light	Power: 6 W, wave length: 810 nm, illumination angle: 0.5~17°, uniform light, nitrogen-filled	Power: 10 W, wave length: 810 nm, illumination angle: 0.3~17°, uniform light, nitrogen-filled	Power: 15 W, wave length: 810 nm, illumination angle: 0.3~17°, uniform light, nitrogen-filled	Power: 15 W, wave length: 810 nm, illumination angle: 0.3~17°, uniform light, nitrogen-filled
MECHANICAL				
Field-of-Regard	360° Pan; =6°~+90° Tilt			
Pan/Tilt Rate of Speed	Speed: 7.5°/s horizontally; 6°/s vertically;			
Position Accuracy	1 mrad			
SYSTEM FEATURES				
Remote Control	RS-485			
Automatic Heater	Built-In			
Programmable Search	32 presets/1 path			
Video Out	Composite signal 1.0Vp-p/75ohm			
Signal Connector	BNC video output			
Interfaces	TCP/IP: Optional, RS-232: Command and control			
ENVIRONMENTAL				
Operation Temperature	-13°F~131°F (-25°C~55°C)	-13°F~131°F (-25°C~55°C)	-13°F~131°F (-25°C~55°C)	-13°F~131°F (-25°C~55°C)
MIL-Std 810E	Rain, sand/dust, shock, vibration	Rain, sand/dust, shock, vibration	Rain, sand/dust, shock, vibration	Rain, sand/dust, shock, vibration
Operating Humidity	Up to 90%	Up to 90%	Up to 90%	Up to 90%
Ingress Protection (IEC 60529)	IP66 Weatherproof	IP66 Weatherproof	IP66 Weatherproof	IP66 Weatherproof
ELECTRICAL				
Input Voltage	24 VAC	24 VAC	24 VAC	24 VAC
Current Draw	2.5 A	2.5 A	2.5 A	2.5 A
Power Consumption	30~85 Watts	60~150 Watts	60~170 Watts	60~170 Watts
PHYSICAL				
Dimensions (W x H x D)	7.5" x 10.25" x 23.5" (190 x 260 x 600 mm)	7.8" x 13.8" x 27.5" (200 x 350 x 700 mm)	7.8" x 13.8" x 27.5" (200 x 350 x 700 mm)	7.8" x 13.8" x 27.5" (200 x 350 x 700 mm)
Weight	55 lb (25 kg)	88 lb (40 kg)	88 lb (40 kg)	88 lb (40 kg)
Housing Material	Shell: Precision aluminum alloy, Glass: optical microlite; Coating: anti-reflective film			
Camera Mounting	4-hole pattern	4-hole pattern	4-hole pattern	4-hole pattern
REGULATORY & WARRANTY				
Regulatory Type	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL	CE, FCC, UL
Warranty	1 Year	1 Year	1 Year	1 Year

Standard Features

Auto-Tracking	Track, follow, and record moving objects in the camera's field of view without operator interaction
Video Analytics	Automatic object detection, object classification, object count, tripwire, wrong direction monitoring, speed detection and more.
IP Encoders	Converts camera to transmit video across a local area network
Image Stabilization	Corrects for minor camera movement due to vibration or sway
Built-in Recording	On-board DVR for portable or remote camera installations

Options and Accessories

Laser Range-Finder	Reports distance between camera and observed objects
Gyroscope	Reports relative direction and angle camera is facing
Compass	Reports absolute direction camera is facing
GPS	Reports physical location of camera (for use with mobile applications)
Wireless	Converts camera to transmit video wirelessly
Wind / Solar	Power camera with wind or solar energy
Tripod	Portable mounting options
Carrying Case	For safe transport of camera
Keyboard Controller	Pan-Tilt-Zoom controller with 3d joystick
Rapid Deployment Kit	Portable command and control for Aventura Intelligent Camera Systems