- **Major components: HD camera/lens, thermal camera, pan/tilt positioner**
- **Applications: sea/airport security, border surveillance, critical infrastructure, oil and gas facilities and perimeter security**
- **Thermal camera: the VP194-AM-HD thermal camera is available in 17μ 640 x 480 resolution (NTSC/PAL)**
- **Lens options: Fixed Field of View Athermalized: 19mm, 25mm, 35mm,50mm, 60mm.**
- **Day CMOS camera: VP194-AM-HD includes a 1⁄2.8" CMOS camera for day/night time threat detection and assessment. The imager is a high sensitivity, high zoom magnification visible camera providing High resolution 2MP color video for daytime operation**
- **Pan/tilt positioner: the variable speed Pan/Tilt unit provides continuous 360° rotation of the cameras at up to 80°/sec on the pan axis and 40°/sec on the tilt axis**

VP194-AM-HD Series Dual Channel Thermal/HD camera is a powerful around the clock, night and day multisensor observation system developed for security applications. It allows long range observation and detection using state of the art Thermal and HD imaging technology ably supporting to identify the objects ranging from near(5m) to far(500m and beyond depending on weather conditions.).

VP194-AM-HD Series Dual Channel Thermal/HD camera features a 1⁄2.8" CMOS sensor 2MP camera for day/night time operation and the choice of 17μ 640x480 thermal engine paired with one of several athermalized lens options: 19mm, 25mm, 35mm, 50mm or 60mm. The thermal camera provides superior threat detection performance day or night including.

VP194-AM-HD Series Dual Channel Thermal/HD camera is designed and constructed to withstand the harshest environmental conditions, including rain, direct sunlight, humidity and dust.

Technical specifications

Power Requirements

Power Input	24VDC
Power Consumption	65w max

Environmental

Storage Temperature	-40°C to +71°C -40° F to +160° F
Operating Temperature	-20°C to +65°C -4° F to +149° F
Humidity	+40°C , 93% RH
Environmental Rating	IP66

Mechanical Parameters

Weight	6.5kg (14.3 lbs)
Construction	Magnalium
Faceplate Wiper	Visble Camera Only
Inverted Mounting	Yes. Software Selectable
DImensions	300mm (l) x 186.5mm (w) x 211.5mm (h) 11.8" (l) x 7.3" (w) x 8.3" (h)

Thermal Camera

Imager Type	Uncooled Microbolometer
Spectral Band	7.5-14µm
Pixel Size / Resolution	17µ / 640 x 480 NTSC/PAL
NETD	<50° mK
Frame Rate	30Hz or 9Hz
Digital Zoom	12x [640 x 480]
Image	Brighness/contrast
WFoV: 50mm (focusfree)	12.4°x9.6°
Lens Type	Athermalized

Day/Night HD Camera

Imager Type	1/2.8" CMOS
Image Scanning	Progressive
Focal Length	30x, 4.3 to 129mm
Resolution	1,920 x 1,080
Digital Formats	1080p, 1080i, 720p
Frame Rate	30 fps
Camera Format	Day/Night (IR Cut Filter)
Day/Night Modes	Auto, Color, B/W
Minimum Illumination	Color: 0.025 lux (F1.6, 50IRE) B/W: 0.0025lux (F1.6, 50IRE)
Privacy Masking	Up to 8 areas
Aperture	f1.6-> f4.8
Imager Horizontal FOV	62.9° to 2.3°
Focus	Auto/Manual [Near, Far]
Focus Search	Normal, Bright, Point Source
Focus Sensitivity	Low, Normal, High
Iris	Auto/Manual [Open/Close]
Digital Zoom	12x
Defog Mode	Off/Auto/Manual [3 Levels, Strength and Color Adj.]
Image Stabilization	Off/On
Enhanced Intensity	Off, Enhanced, Whiteout Reduction
Dynamic Range	>90dB Off/On [3 Levels, Normal, Combo, Contrast]
Gain Control	Auto/Manual/Max
Back Light Comp	Off/On [Level Setting]
Shutter (AES)	Auto/Manual [1/2-30,000]
S/N Ratio	<50dB
Noise Reduction	3D DNR

Video Format

Video Streams	2 video streams
Video Type	Dual Channel (Thermal/CCD) - 2 channel IP video
Video Codec	H.264
Video Protocols	TCP/IP,HTTP,DHCP,DNS,RTP/RTCP,PPPoE, DDNS
Video Resolution	1080P(1920×1080) / 720P(1280×720) / D1(704×576/704×480) / CIF(352×288/352×240)
Video Frame Rate	Main stream: 1080P/720P(1 ~ 25/30fps) Substream: D1/CIF(1 ~ 25/30fps)
Video Data Rate	64Kbs to 8Mbps
Default Baud Rate	4800
Bite Rate Control	Variable or Constant
Video GOV	1 to 600, 30 default

Network Interface

Network Format	RJ-45 (10/100Base-T)
Network Protocol	TCP/IP,HTTP,DHCP,DNS,RTP/RTCP,PPPoE,Telnet, DDNS,ONVIF Profile S
Media Players	VLC
Camera Protocols	ONVIF S
User Access	Minimum 5 users

Pan/Tilt Unit

Maximum Pan Speed	Variable Speed, 0.1° - 80°/sec
Maximum Tilt Speed	Variable Speed, 0.1° - 40°/sec
Pan Range	360° continuous
Tilt Range	+90°/-90°
Presets	80
Auto Scan	1
Cruising Track	8, each with 10 preset positions
Power Failure Recovery	Recover to previous PTZ and lens status after power failure
Guard Location	Call preset, cruising track or atuo scan if there is no command in a period of time
Relay AUX Output	2 groups

Certifications and Approval

Product Certifications	CE, FCC, RoHS, IP66

Ordering information

Model	HD Camera/Lens	Thermal Lens	Thermal Engine	Video Type
VP194-AM50A17V-HDP00	4.3 to 129mm Continuous Zoom	50mm Athermalized	17μ 640 x 480	IP

Performance

Legend

D/N Detection - 2 PoT
D/N Recognition - 6 PoT

= Human Subject Size
1.8m x 0.6m

Detection: 2 pixels on target
Recognition: 6 pixels on target

100m = 328ft   1000m = .62mi

500m = 1640ft   1610m = 1mi   * Performance depends on atmospheric conditions