

VP194-D4-PA Series

Dual Channel Thermal/CCD Camera

Infinova[®]
The Integrator's Manufacturer



● Major Components

- CCD Camera/Lens - Color (Day) Camera and lens for detailed imaging
- Thermal Camera - Thermal (Night) Camera for IR Imaging
- Thermal Camera Lens - Continuous Options
- Pan/Tilt Positioner - High accuracy pan/tilt unit
- Optional Laser Range Finder module
- Optional GPS module

● Applications

- Port Security
- Airport Perimeters
- Nuclear Power Plants
- Border Surveillance
- Critical Infrastructure
- Oil and Gas Facilities

Infinova VP194-D4-PA series camera is powerful long range, night and day multi-sensor observation systems developed for security applications. It allows long range observation and detection using state of the art thermal imaging and CCD technology. The camera features a color CCD camera for day time operation and high performance cooled and uncooled thermal cameras with several long range lens options for both day and night operation.

The VP194-D4-PA series camera is designed and constructed to withstand the harshest weather and environmental conditions.

Configurations of this series camera are named based on their thermal imager.

Technical Specifications

Thermal Camera Specifications

Configuration	D420
Thermal Type	Cooled
Thermal Engine	17 μ 640 x 512
Lens Type	Continuous Zoom
Focal Length	21 - 420mm
Lens F #	f/4.0
Video Type	(NTSC/PAL); 30Hz
Spectral Band	3 - 5 μ
NETD	<25° mK
Horizontal Field of View (wide)	25.1°
Horizontal Field of View (narrow)	1.3°
Digital Zoom	1x, 2x, 4x
Focus Control	Motorized, Autofocus on Demand
Control Operation	Polarity, NUC, Image Flip, Manual gain/level, Optical & Digital Zoom, Autofocus on Demand

CCD Camera Specifications

Imager Type	1/2" Color CCD
Effective Pixels	768 x 494 (NTSC); 752 x 582 (PAL)
Lens Type	32x Continuous Zoom
Lens Focal Length	15.6 - 500mm
Imager Horizontal FOV	22.4° to 0.45°
S/N ratio	>50 dB

Laser Range Finder Specifications (optional)

Configuration Availability	D420
Maximum Range	20000 meters
Minimum Range	80 m
Range Accuracy @<1500m	+/- 5m
Range Accuracy @>1500m	+/- 5m
Nominal Wavelength	1540nm
Laser Safety Rating	Class 1

Pan / Tilt Positioner Specifications

Position accuracy (resolution)	+/- 1.5 mRad
Minimum pan speed	0.1%/sec.
Maximum pan speed	50%/sec.
Minimum tilt speed	0.1%/sec.
Maximum tilt speed	50%/sec.
Tilt range	+90°/-90°

Power Requirements

Power Input	24VDC \pm 1%
Power Consumption	30w typical (static, no heaters); 390w max (moving, with heaters)

Environmental

Storage Temperature	-40°F to +160°F (-40°C to +71°C)
Operating Temperature	-40°F to +140°F (-40°C to +60°C)
Humidity	+40°C, 93% RH
Environmental Rating	IP66

Communication

Control Connections	RS-422/RS-485 Serial
Protocol	Pelco D
Default Baud Rate	9600

Technical specifications (continued)

Pan/Tilt Unit

Pan/Tilt Speed	0-50° per second
Pan Range	360° continuous
Tilt Range	-90° to +90°
Pan/Tilt Resolution	+/- 1.5 mRad

Mechanical Parameters

Dimensions	Dependent on Configuration (refer to ICDs)
Weight	64 lbs (29 kg)

Others

Video Format	Dual Channel (Thermal/CCD) - 2 BNC's; RS-170/CCIR, 1.0V p-p, 75ohm
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Certifications and Approvals

Product Certifications	CE, FCC, IP66
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Ordering Information

VP194-D420Z17V-PAP00	D420, 15.6-500mm Continuous Zoom (for CCD Camera/Lens), 17μ 640x512 cooled and 21-420mm (for Thermal Engine/Lens), PAL, LRF
VP194-D420Z17V-PAP01	D420, 15.6-500mm Continuous Zoom (for CCD Camera/Lens), 17μ 640x512 cooled and 21-420mm (for Thermal Engine/Lens), PAL

Performance

Legend

D/N Detection (Thermal) - 2 PoT

D/N Recognition (Thermal) - 6 PoT



= Human Subject Size
1.8m x 0.6m



= Vehicle Subject Size
2.3m x 2.3m

Detection: 2 lines on target
Recognition: 6 lines on target

