

# VP194-D2-PA Series

## Dual Channel Thermal/CCD Camera

**Infinova**<sup>®</sup>  
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-D2-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-D2-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	D275
Thermal Type	Cooled
Thermal Engine	17 $\mu$ 640 x 512
Lens Type	Continuous Zoom
Focal Length	19 - 275mm
Lens F #	f/5.5
Video Type	(NTSC/PAL); 30Hz
Spectral Band	3 - 5 $\mu$
NETD	<25° mK
Horizontal Field of View (wide)	28.3°
Horizontal Field of View (narrow)	2.0°
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	10 - 320mm
Imager Horizontal FOV	35.3° to 1.1°
S/N ratio	>50 dB

### Laser Range Finder Specifications (optional)

Configuration Availability	D275
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	62 lbs (28 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-D275Z17V-PAP00	D275, 10-320mm Continuous Zoom (for CCD Camera/Lens), 17 $\mu$ 640x512 cooled and 19-275mm (for Thermal Engine/Lens), PAL, LRF
VP194-D275Z17V-PAP01	D275, 10-320mm Continuous Zoom (for CCD Camera/Lens), 17 $\mu$ 640x512 cooled and 19-275mm (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

