VP190-A-PA Series Superior Thermal Security Cameras





Innovative Features

Unique signal processing algorithms provide enhanced contrast for Video Analytics and Infinova's innovative Fire Detection Algorithm

• High Image Quality

High Resolution, small pixel pitch

Advanced Optics

Thermal Imaging Autofocus

Versatility

Wide variety of fixed, PTZ, and optics configurations

Easy Installation

Pelco D protocol, common industry mounting options, serial or IP communication

Outdoor Design

Outdoor designed to withstand the harshest environmental conditions, rated IP66

The VP190-A-PA camera is a broad portfolio of high performance outdoor rated thermal cameras for 24/7 perimeter surveillance, observation, and monitoring of critical infrastructure and sensitive sites.

The VP190-A-PA camera is available as a fixed camera system mounted on a Pan/Tilt Positioner and offers a variety of optics including fixed single field of view athermalized lenses.

The VP190-A-PA camera also features the option for either standard 30Hz video frequency or optional 9Hz frequency; the 9Hz video option allows for simple and easy export.

The VP190-A-PA camera is ruggedly designed to withstand the harshest weather and environmental conditions, including rain, direct sunlight, high humidity, dust, heat, and cold.

The VP190-A-PA camera is widely used in Port Security, Airport Perimeters, Nuclear Power Plants, Border Surveillance, Critical Infrastructure, and Oil and Gas facilities.

Technical specifications

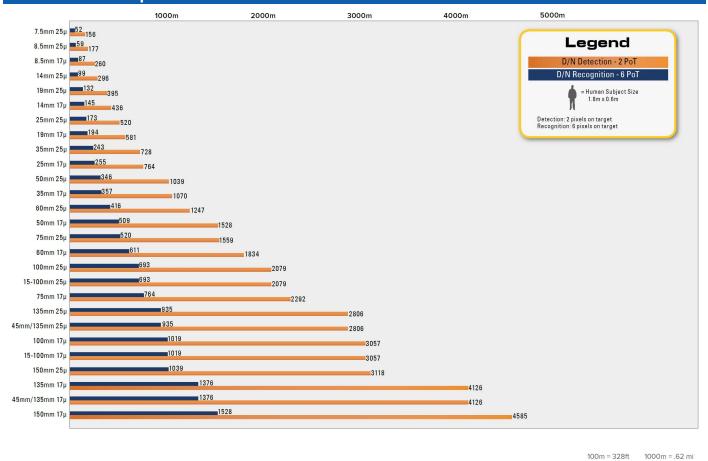
| Power Requirements | | | | |
|--------------------------|--------------------------------------------------------------------------|--|--|--|
| Power Input | 24VDC±1% | | | |
| Power | <35W (Typical); 120W (Max.) | | | |
| Consumption | (Typical), 12011 (Max.) | | | |
| Environmental Parameters | | | | |
| Operating Temperature | -27°F to + 131°F (-33°C to +55°C) | | | |
| Storage Temperature | -40°F to + 160°F (-40°C to +71°C) | | | |
| Humidity | +40°C, 93% RH | | | |
| Environmental Rating | IP66 | | | |
| Mechanical Parameters | | | | |
| Weight | 25μ: 17476 g (100mm Athermalized); 17μ: 17566 g (100mm Athermalized); | | | |
| Dimensions (W×D×H) | 12.91"×16.34"×18.62" (328mm×415mm×473mm) | | | |
| Thermal Camera | | | | |
| Image Type | Uncooled Microbolometer | | | |
| Video Output | RS-170/CCIR, 1.0V p-p, 75ohm | | | |
| Spectral Band | $7.5\text{-}14\mu$ | | | |
| Pixel Size / | 17μ / $640{\times}480$ NTSC / PAL; | | | |
| Resolution | 25μ / $320{\times}240$ NTSC (384 x 288 PAL) | | | |
| | 17μ 640 x 480: <50° mK NTSC/PAL | | | |
| NETD | 25μ 320 x 240: <50° mK NTSC | | | |
| | 25μ 384 x 288: <50° mK PAL | | | |
| | | | | |

| Video Frequency | 30Hz or 9Hz (Easy Export) | | | |
|-----------------------------------------------|----------------------------------------------------------------------------------|--|--|--|
| Lens Options: Athermalized (Focus Free) | 17μ (NTSC/PAL): 100mm(6.2°) 25μ (NTSC): 100mm(4.6°) 25μ (PAL): 100mm(5.5°) | | | |
| Communication | | | | |
| Control connections | RS-422/RS485 4 wires | | | |
| Control Protocols | Pelco D | | | |
| Remote Operation | Serial | | | |
| PAN/TILT UNIT | | | | |
| Pan Range/Speed | 360° continuous / 0-100° per second | | | |
| Tilt Range/Speed | -90° to +90° / 0-50° per second | | | |
| Backlash | <0.2° | | | |
| # of Presets | 64 | | | |
| Speed Variability | d Variability On-the-fly speed changes | | | |
| Standards & Certifications | | | | |
| IP66, CE, FCC | | | | |

Ordering information

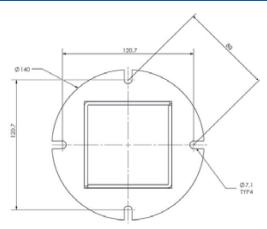
VP190-AE100A25Q-PA020 VP190-AE100A17V-PA020 Analog thermal PTZ camera, 25μ , NTSC/PAL, 100mm f/1.6, Athermalized, Fixed Focus lens Analog thermal PTZ camera, 17μ , NTSC/PAL, 100mm f/1.6, Athermalized, Fixed Focus lens

Thermal camera performance



Camera mounting information

*Performance Dependent on Atmospheric Conditions



500m = 1640ft

1610m = 1 mi

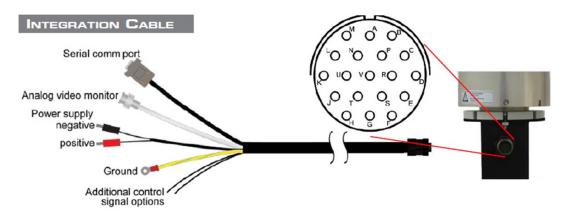
Wiring assignment

Communication

| Connector Pin # | Signal name | Description | Input/ Output |
|--------------------|-------------|--------------------------------------------|------------------|
| F | COMM_TX+ | RS422/RS485 Transmit High | Output |
| E | COMM_TX- | RS422/RS485 Transmit Low RS232 Transmit | Output |
| Н | COMM_RX+ | RS422 Receive High RS232 Receive | Input |
| G | COMM_RX- | RS422/RS485 Receive Low | Input |

Power, Video, Fire Detection

| Connector Pin # | Signal name | Description | Input/ Output |
|--------------------|----------------|---------------------------------------|------------------|
| K,J | 24VDC_PWR_IN* | Power Supply In | Input |
| U,V | 24VDC_PWR_RTN* | Power Supply Return | Input |
| A | GND | Chassis Ground | - |
| D | VIDEO | Analog Video Signal | Output |
| C | VIDEO_RTN | Analog Video Signal RTN | Output |
| N | FD_ALERT | Fire Detection Alert (Dry Contact) | Output |
| R | FD_ALERT | High Risk of Fire Alert (Dry Contact) | Output |



Shipping contents

Standard Order includes:

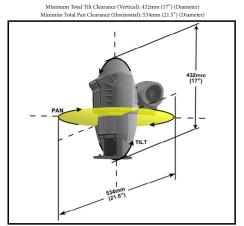
- 1) Thermal camera & pan/tilt positioner
- 2) Pedestal Adaptor
- 3) Camera to PT Positioner Cable
- 4) Software & Documentation CD containing
 - a) User Manual
 - b) Test & Configuration Software
- 5) Cable Mating Connector



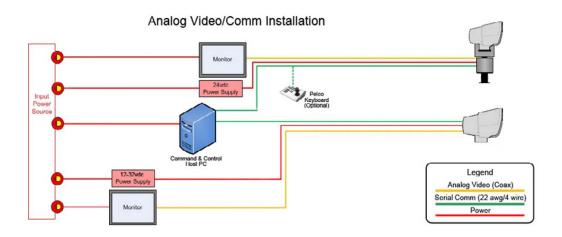
System installation dimensions

Required Installation Clearance





Typical system design



System drawings

