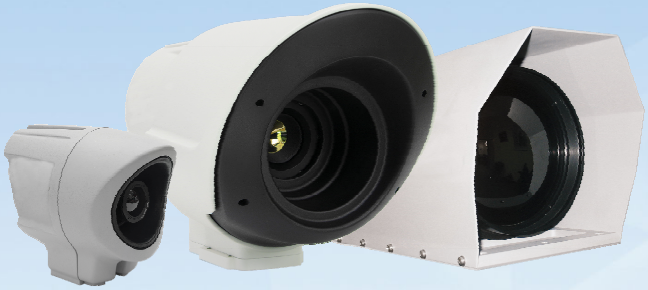
VP190-C-A Series

Superior Thermal Security Cameras

Infinova®
The Integrator's Manufacturer



- **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 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-C-A 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-C-A camera is available as a fixed camera system and offers a variety of optics including fixed single field of view athermalized lenses.

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

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

Technical specifications

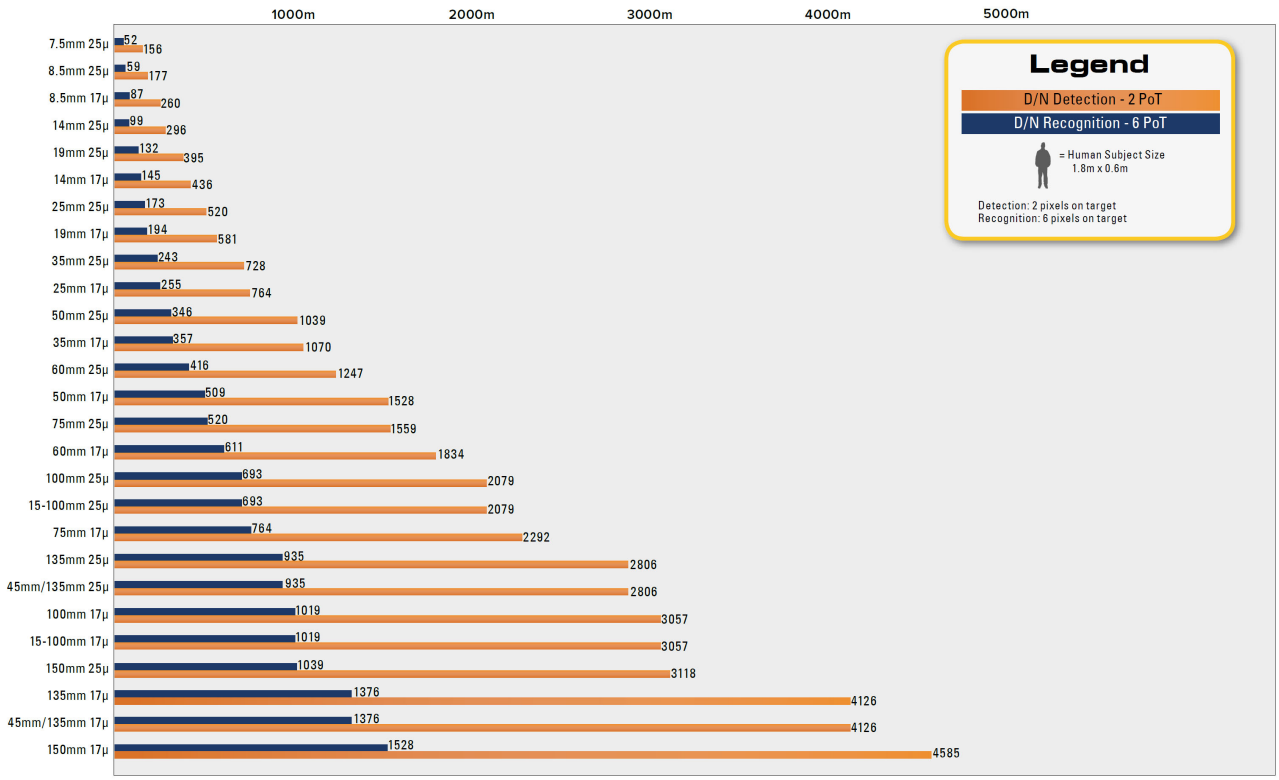
Power Requirements	
Power Input	12-32VDC
Power Consumption	<4W (Typical); 12W (Max.)
Environmental Parameters	
Operating Temperature	-40°F to + 140° F (-40°C to +60° C)
Storage Temperature	-40°F to + 160°F (-40°C to +71°C)
Humidity	+40°C, 93% RH
Environmental Rating	IP66
Mechanical Parameters	
Weight	25μ: 2295 g (8.5mm Athermalized); 2897 g (14mm Athermalized); 2282 g (19mm Athermalized); 2406 g (35mm Athermalized); 2499 g (50mm Athermalized); 2479 g (60mm Athermalized); 4326 g (100mm Athermalized); 17μ: 2385 g (8.5mm Athermalized); 2987 g (14mm Athermalized); 2372 g (19mm Athermalized); 2496 g (35mm Athermalized); 2589 g (50mm Athermalized); 2569 g (60mm Athermalized); 4416 g (100mm Athermalized);
Dimensions (W×D×H)	17μ / 25μ (8.5/14/19/35/50/60mm Athermalized): 5.32”×7.95”×6.65” (135mm×202mm×169mm) 17μ / 25μ(100mm Athermalized): 9.53”×8.07”×12.91” (205mm×328mm×242mm)

Thermal Camera	
Image Type	Uncooled Microbolometer
Video Output	RS-170/CCIR, 1.0V p-p, 75ohm
Spectral Band	7.5-14μ
Pixel Size / Resolution	17μ / 640×480 NTSC / PAL; 25μ / 320×240 NTSC (384 x 288 PAL)
NETD	17μ 640 x 480: <50° mK NTSC/PAL 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): 8.5mm (73.3°), 14mm(44.5°), 19mm (33.2°), 35mm (17.8°), 50mm(12.5), 60mm(10.4°), 100mm (6.2°) 25μ (NTSC): 8.5mm (53.9°), 14mm(32.7°), 19mm (24.4°), 35mm (13.1°), 50mm(9.2°), 60mm(7.6°), 100mm (4.6°) 25μ (PAL): 8.5mm (64.7°), 14mm(39.3°), 19mm (29.3°), 35mm (15.7°), 50mm(11.0°), 60mm(9.2°), 100mm (5.5°)
Communication	
Control connections	RS-422/RS485 4 wires
Control Protocols	Pelco D
Remote Operation	Serial
Standards & Certifications	
IP66, CE, FCC	

Ordering information

VP190-CA8A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 8.5mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA8A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 8.5mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA14A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 14mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA14A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 14mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA19A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 19mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA19A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 19mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA35A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 35mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA35A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 35mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA50A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 50mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA50A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 50mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA60A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 60mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA60A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 60mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA100A25Q-0A020	Analog thermal camera, 25μ, NTSC/PAL, 100mm f/1.2, Athermalized, Fixed Focus lens
VP190-CA100A17V-0A020	Analog thermal camera, 17μ, NTSC/PAL, 100mm f/1.2, Athermalized, Fixed Focus lens

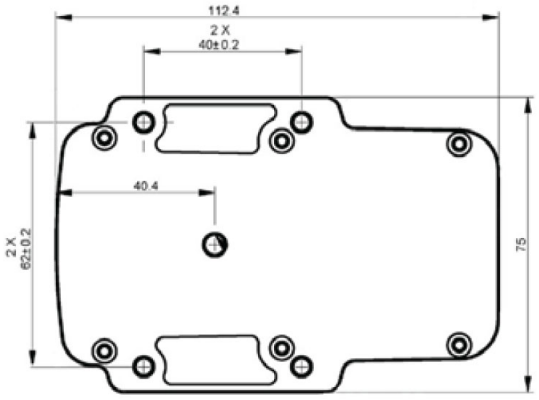
Thermal camera performance



*Performance Dependent on Atmospheric Conditions

100m = 328ft 1000m = .62 mi
500m = 1640ft 1610m = 1 mi

Camera mounting information



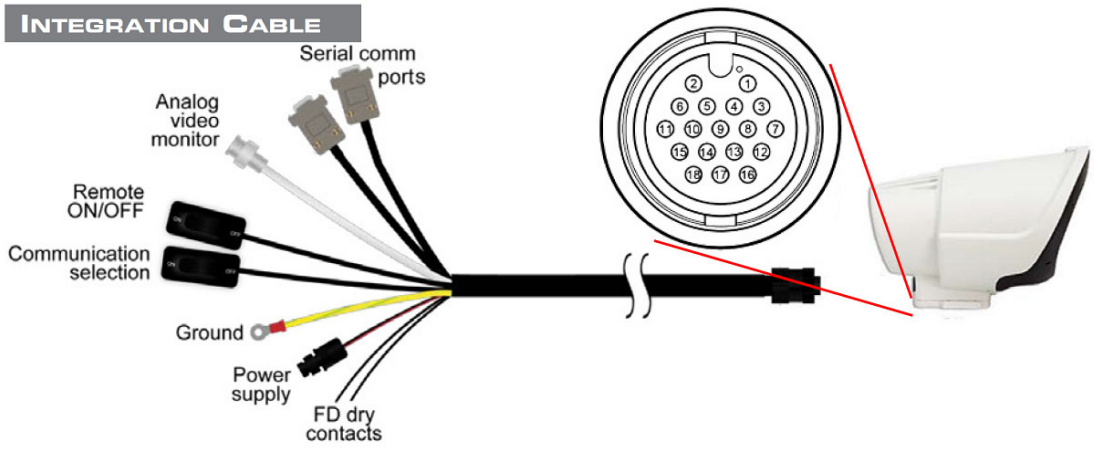
Wiring assignment

Communication

Connector Pin #	Signal name	Description	Input/ Output
2	COMM_TX+	RS422/RS485 Transmit High	Output
6	COMM_TX-	RS422/RS485 Transmit Low RS232 Transmit	Output
11	COMM_RX+	RS422 Receive High RS232 Receive	Input
15	COMM_RX-	RS422/RS485 Receive Low	Input
10	COMM_SEL	RS422/232 Comm. Select	Input
18	PIC_TX	Factory Settings and Technician Use only (RS232)	Input
17	PIC_RX		
14	COMM_GND	Communication Ground	-

Power, Video, Fire Detection

Connector Pin #	Signal name	Description	Input/ Output
8	PWR_IN_RTN*	Power Supply Return	Input
9	PWR_IN*	Power Supply In	Input
7	GND	Chassis Ground	-
13	REMOTE_PWR	Remote Pwr ON/OFF	Input
1	VIDEO	Analog Video Signal	Output
3	VIDEO_RTN	Analog Video Signal RTN	Output
4	FD_ALERT	Fire Detection Alert (Dry Contact)	Output
5	FD_ALERT	High Risk of Fire Alert (Dry Contact)	Output
12	SPARE	Spare wire	-
16	SPARE	Spare wire	-



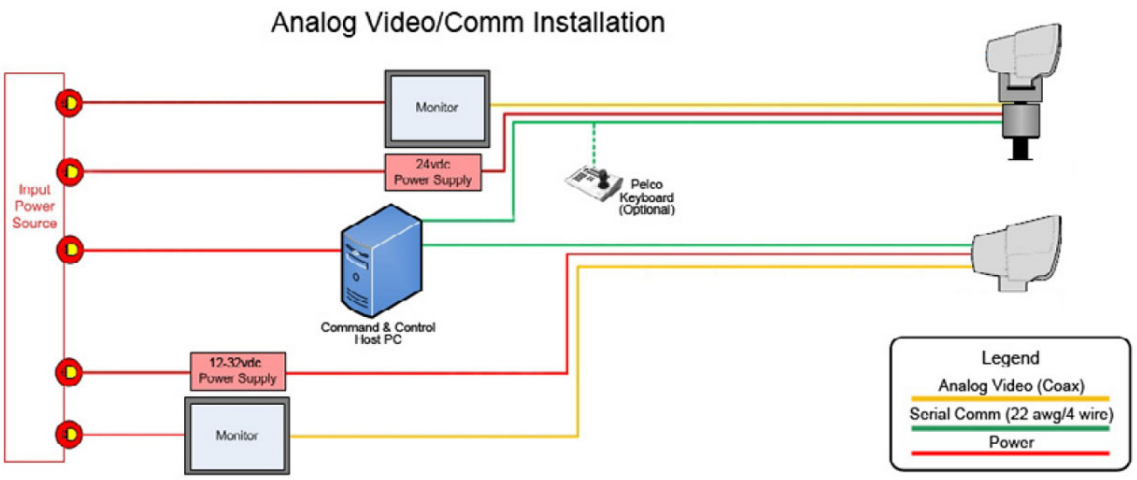
Shipping contents

Standard Order includes:

1) Thermal camera & pan/tilt positioner
2) Cable Mating Connector (not shown)
3) Software & Documentation CD
   a) User Manual
   b) Test & Configuration Software

System installation dimensions

Typical system design



System drawings