

# VPA141-A4 SERIES

HD DUAL- SPECTRUM EXPLOSION-PROOF THERMAL CAMERA

**Infinova**<sup>®</sup>



## FEATURES

- Ex d II C T6 Gb/Ex tD A21 IP68 T80°C
- Maximum Image Size: 400×300
- Sensitivity: 40mK @F1.0
- Temperature measurement range:  
-20°C ~+150°C / -0°C ~+550°C
- Temperature Measurement Accuracy  $\pm 2^{\circ}\text{C}$  or  $\pm 2\%$  of reading  
(maximum value)
- Support spot, line, polygon area and full screen temperature  
measurement.
- Support over temperature alarm, temperature difference alarm,  
temperature range alarm and other alarm modes.
- Support black hot, white hot, iron red and rainbow, up to 17  
color modes.
- Visible camera: 2.7-13.5mm optical zoom
- 1/2.8" CMOS
- 4MP
- 316L stainless steel

# DESCRIPTION

The dual-view infrared thermal camera is equipped with high-definition visible light and infrared thermal imaging movements, high-definition visible light plus high-precision infrared thermal imaging dual monitoring.

The system uses 316L stainless steel to ensure its good explosion-proof performance in hazardous areas. It has an absolute operating temperature range of -20°C~150°C or -0°C~550°C. This camera is properly sealed to prevent the intake of flammable dust and ensure strong corrosion-resistant capabilities.

It's suitable for containing combustible dust mixture environment. Such as: petroleum, chemical, mining, military, medicine, oil depot, ships, drilling platforms, gas stations, fireworks production, food processing, storage and so on.

# TECHNICAL SPECIFICATIONS

<b>Lens (Visible)</b>	
Image Sensor	1/2.8" progressive scan CMOS
Optical Zoom	5X
Digital Zoom	-
Focal Length	f=2.7~13.5mm
Iris	ICR
Focus	-
FOV(H/V/D)	Horizontal: 87.5 °~26 °, vertical: 64.8 °~19.9 °
Lens Mount	C/CS Mount
<b>Lens (Thermal)</b>	
Imager Type	Uncooled FPA Detectors
Lens Type	Fixed
Spectral Band	8-14μm
Pixel Size	17μm
NETD	40mk (@F#=1.0)
Focal Length	8mm,15mm,25mm (Optional)
FOV	H25° x V19°(15mm)
Palette	Iron red, rainbow, white heat, black heat, etc. 17 types.
<b>Video</b>	
Camera Resolution (Visible Lens)	4MP
Camera Resolution (Thermal Lens)	400x300
Max. Coding Capacity (Visible Lens)	Major stream: 2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720 25/30fps Minor stream: D1 VGA 640x360 CIF QVGA 25/30fps Third stream: VGA CIF QVGA 25/30fps
Max. Coding Capacity (Thermal Lens)	400x300
Data Rate	VBR/CBR Major stream: 128kbps~1024kbps Minor stream: 128kbps~4096kbps
Video Compression	H.265/H.264/MJPEG
Multi-Streaming	Three - stream independent output
Video Rotation	Support
<b>Audio</b>	
Audio Compression	G.711, RAW_PCM
Sample Rate	8KHz
Audio Interface	1ch Audio In, 1ch Audio Out
Two-way Audio	Available
Mic & Speaker	-

<b>Image</b>	
Shutter	Auto/Manual (1/5s ~ 1/20000s)
WDR	Up to 96 dB
Exposure	Auto/Manual
Sensitivity	Color mode: 0.01lux (F1.6, AGC ON); B&W mode: 0 Lux (IR ON)
White Balance	Auto
Video Adjustment	Brightness, contrast, hue, sharpness
Noise Reduction	Auto/Manual 2D,3D
S/N Ratio	≥55dB
Defog	Available
EIS	Available
Mirror	Support
Corridor Mode	Support
Day/Night Switching	ICR
AGC	Available
BLC	Available
HLC	Available
Privacy Mask	Up to 5 definable zones
ROI	Available
OSD	Temperature, Time, Date, Channel
<b>Pan/Tilt Functions</b>	
Preset	-
Pattern	-
Autopan	-
Normal Tour	-
Home Return	-
Timing Tour	-
Autoscan	-
Area Zoom	-
<b>IR Illumination</b>	
Smart-IR	Yes
Wave Length	8~14μm
Night Vision Distance	30m
<b>Temperature Measurement</b>	
Screening	Yes
Function	Wide range of ambient temperature test Method- Point temperature measurement, line temperature measurement, polygon area temperature measurement, full screen temperature measurement Temperature alarm - Over temperature alarm, temperature difference alarm, temperature interval alarm
Measurement Distance	Based on the different lens

# TECHNICAL SPECIFICATIONS

Measurement Range	-20°C ~ +150°C / 0°C-550°C
Accuracy	±2°C or ±2 % (maximum value)
<b>Smart Analytics</b>	
Video Analytics	Smart alarm - Motion detection alarm, I/O alarm, IP conflict alarm, disk alarm, temperature measurement alarm, intelligent analysis alarm, network abnormal alarm Smart Video Analytics - intrusion, wire crossing, object abandoned, object lost
<b>Storage</b>	
Storage Slots	Support single card
Built-in Storage	up to 256GB
NAS Storage	-
Local PC Recording	Support
<b>Alarm</b>	
Alarm Ports	1
Alarm Input	1
Alarm Association	Mobile detection alarm, IP conflict alarm, disk alarm
<b>System Functions</b>	
Operating System	Win 7 and higher versions
Browser	IE11 and higher versions, Google, Firefox, Microsoft Edge
Access Protocol	ONVIF SDK, CGI
Multiple Access	Up to 10-ch simultaneous access
Web Server	Available
Remote Upgrade	Available
Password Protection	Available
RS485 Port	-
Analog Video Out	-
Maximum Number of Users	10
Wiper	-
<b>Network</b>	
Network Interface	1*RJ45 10/100M self-adaptive Ethernet port

Network Protocols	IPv4/IPv6, HTTP, HTTPS, RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, SIP, 802.1x, DDNS, PPPoE, FTP, SNMP, QOS, UPNP, ICMP, IGMP, NTP
IP Address Filtering	Support
Network Delay	<200ms
<b>Environmental</b>	
Anti-Static	-
Surge Protection	-
Operating Temperature	-40°F~140°F (-40°C~+60°C)
Storage Temperature	-40°F~140°F (-40°C~+60°C)
Operating Humidity	≤ 95% RH
Environmental Rating	IP68
Impact Resistance	-
<b>Mechanical</b>	
Manual Speed	-
Preset Speed	-
Rotation Angle	-
Preset Accuracy	-
Electric Motor	-
<b>Electrical</b>	
Power Supply	12VDC
Power Consumption	-
<b>Physical</b>	
Product Dimension (L×W×H) or (H x D)	218.5*188*188mm
Package Dimension (L x W x H)	-
Unit Weight	28.66lbs. (13Kg)
Shipping Weight	-
<b>Certifications</b>	
Product Certifications	Ex d IIC T6 Gb/Ex tD A21 IP68 T80°C

# ORDERING INFORMATION

VPA141-A425-M43	HD Dual-spectrum Explosion-proof Bullet Thermal Camera, visible camera 4MP, 12.7-13.5mm lens, Thermal resolution 400X300, 25mm thermal lens, Temperature measurement range-40°C ~150°C /0°C ~550°C, Accuracy±2°C, IR distance up to 30m, IP68, DC24V, 316L stainless steel
VPA141-A415-M43	HD Dual-spectrum Explosion-proof Bullet Thermal Camera, visible camera 4MP, 12.7-13.5mm lens, Thermal resolution 400X300, 15mm thermal lens, Temperature measurement range-40°C ~150°C /0°C ~550°C, Accuracy±2°C, IR distance up to 30m, IP68, DC24V, 316L stainless steel
VPA141-A408-M43	HD Dual-spectrum Explosion-proof Bullet Thermal Camera, visible camera 4MP, 12.7-13.5mm lens, Thermal resolution 400X300, 8mm thermal lens, Temperature measurement range-40°C ~150°C /0°C ~550°C, Accuracy±2°C, IR distance up to 30m, IP68, DC24V, 316L stainless steel
<b>Accessories</b>	
<b>Power Supply</b>	
N3922-24D-3	AC to DC Power Supply, Plug-In, 230VAC, Output 24VDC 3A

**\*Note:** - "Confirmation of SD Card installation has to be notified with the Camera Purchase Order. Such confirmation if received on Order Readiness will attract additional cost. Please contact Infinova to know more".

# MOUNTING

