

# VPA141-A4 SERIES

HD DUAL- SPECTRUM EXPLOSION-PROOF THERMAL CAMERA

**Infinova®**



## 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

Lens (Visible)		Image	
Image Sensor	1/2.8" progressive scan CMOS	Shutter	Auto/Manual (1/5s ~ 1/20000s)
Optical Zoom	5X	WDR	Up to 96 dB
Digital Zoom	-	Exposure	Auto/Manual
Focal Length	f=2.7~13.5mm	Sensitivity	Color mode: 0.01lux (F1.6, AGC ON); B&W mode: 0 Lux (IR ON)
Iris	ICR	White Balance	Auto
Focus	-	Video Adjustment	Brightness, contrast, hue, sharpness
FOV(H/V/D)	Horizontal: 87.5 °~26 °, vertical: 64.8 °~19.9 °	Noise Reduction	Auto/Manual 2D,3D
Lens Mount	C/CS Mount	S/N Ratio	≥55dB
Lens (Thermal)		Defog	Available
Imager Type	Uncooled FPA Detectors	EIS	Available
Lens Type	Fixed	Mirror	Support
Spectral Band	8-14μm	Corridor Mode	Support
Pixel Size	17μm	Day/Night Switching	ICR
NETD	40mk (@F#=1.0)	AGC	Available
Focal Length	8mm,15mm,25mm (Optional)	BLC	Available
FOV	H25° x V19°(15mm)	HLC	Available
Palette	Iron red, rainbow, white heat, black heat, etc. 17 types.	Privacy Mask	Up to 5 definable zones
Video		ROI	Available
Camera Resolution (Visible Lens)	4MP	OSD	Temperature, Time, Date, Channel
Camera Resolution (Thermal Lens)	400x300	Pan/Tilt Functions	
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	Preset	-
Max. Coding Capacity (Thermal Lens)	400x300	Pattern	-
Data Rate	VBR/CBR Major stream: 128kbps~10240kbps Minor stream: 128kbps~4096kbps	Autopan	-
Video Compression	H.265/H.264/MJPEG	Normal Tour	-
Multi-Streaming	Three - stream independent output	Home Return	-
Video Rotation	Support	Timing Tour	-
Audio		Autoscan	-
Audio Compression	G.711, RAW_PCM	Area Zoom	-
Sample Rate	8KHz	IR Illumination	
Audio Interface	1ch Audio In, 1ch Audio Out	Smart-IR	Yes
Two-way Audio	Available	Wave Length	8~14μm
Mic & Speaker	-	Night Vision Distance	30m
		Temperature Measurement	
		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, 2.7-13.5mm 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, 2.7-13.5mm 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, 2.7-13.5mm 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

