Panasonic


# IP66 THERMAL IMAGING CAMERA INTEGRATED BY PANASONIC

**THANKS TO HIGH-PERFORMANCE SPECIFICATION, FAST AND EASY INSTALLATION AND ROBUST BUILD QUALITY, PANASONIC THERMAL CAMERAS ARE THE IDEAL TOOL FOR HIGH PRIORITY SECURITY APPLICATIONS WITHIN TRANSPORTATION, UTILITIES, GOVERNMENT, COMMERCIAL AND FINANCIAL MARKETS.**

## Integrated Thermal Surveillance Camera Solutions

Panasonic thermal cameras complement Panasonic's already extensive range of surveillance and security solutions with includes everything from full high definition 1080P cameras, monitors and recording solutions, cloud based recording and storage, business intelligence video analytics, IP and analogue cameras, 360 degree view cameras to infra-red cameras for low light conditions.
Panasonic thermal cameras with built-in motion detection not only allow night time vision without illumination, but also complement Panasonic vision cameras during the daytime, giving the following enhancements:

- Ability to see people and vehicles through foliage and smoke
- Easily identify the presence of people who try to blend into the scenery through camouflage
- Detect person at up to 1.5km
- Detect vehicles at up to 4km
- Inbuilt motion detection enables the creation of effective virtual fences or areas to be monitored for intrusion with significantly reduced false triggers compared to vision cameras
- Enable clearer and easier monitoring of scenes by security personnel for people and vehicle movement

## Powerful Specification, High Performance

Behind its high quality germanium window, Panasonic thermal cameras deploy a powerful uncooled silicon microbolometer thermal detector available in a choice of 384x288 and 640x480 resolutions with sensor frequency rates of 8.3Hz or 25Hz. The 384x288 sensor has a thermal sensitivity of 50mK, the 640x480 sensor has a thermal sensitivity of 70mK. A spectral sensitivity rating of 8µm to 14µm enables detailed clarity even on the darkest of nights or most difficult of scenes.

Panasonic thermal cameras are a powerful electronic sensor and security measure for the most challenging operational circumstances. Available in a range of lens sizes from 15mm to 45mm with other sizes available on demand for special applications.

Connectivity is well covered with two H.264 and one .JPEG network interfaces and smart features such as Motion Adaptive Interlace / Progressive Conversion enables clear viewing of moving scenes.

Video Motion Detection can also be programmed to trigger alarms along with Command Alarm and Video Loss depending on specific requirements whilst it is possible to always display the camera title within the output image for faster identification of threat location and greater real time situational awareness.

## Fast and Easy to Install

Intelligent PoE+ provides both network connectivity and power supply in a single cable, reducing the number of cable runs required and cutting setup time whilst Plug and Play compatibility with Panasonic recorders and software ensures additional speed of install.

Panasonic thermal camera units are also designed to be lightweight using a polycarbonate main body and to simplify cable management and convenience the housing swings away from the mount during installation.
Mounting options include wall, pole and ceiling mount and 8 languages are supported through the multiple language user interfaces for maximum flexibility.

## IP66 Rugged & Robust Reliability

Aluminium mountings, IP66 rated resilience means Panasonic thermal camera offers signature Panasonic reliability, even in the most testing of conditions. Through the use of a blower and heater, continuous operation in a range of temperatures from -30°C to 55°C is possible and a sunshield further protects the unit from extreme sunlight.

## Ready for a Range of Applications

Panasonic thermal cameras are designed to enhance the extensive existing range of Panasonic solutions in a broad range of high priority security and surveillance applications.

- Transportation / Airports, railways and sea ports
- Utilities / Power, water and gas facilities
- Government / Military and border security use
- Commercial / Research and data centres, manufacturing, financial an banking organisations where cash is frequently handled

# Specifications

| | | | |
|---|---|---|---|
| Thermal Detector | Detector Type | | Silicon Microbolometer |
| | Detector Resolution Options | | 384x288 or 640x480 |
| | Image refresh rate options | | 8.3Hz or 25Hz |
| | Spectral Response | | 8µm to 14µm |
| | Thermal Sensitivity | 384x288 | 50mK @ 20°C ambient and 30°C scene temperature |
| | | 640x480 | 70mK @ 20°C ambient and 30°C scene temperature |
| | Colour Palette | | Greyscale - Blackhot, Greyscale -Whitehot, Ironbow |
| | Digital Zoom | | Continuous |
| | Pan & Tilt | | Electronic Pan & Tilt whilst in zoom |
| | Focus | | Fixed preset |
| | Standard Model Lens options (other available upon request) | 384 x 288 models | 15mm<br>18.5mm<br>25mm<br>45mm |
| | | 640 x 480 models | 25mm<br>45mm |
| Browser GUI | Camera Control | | Digital zoom - Pan / tilt in zoomed image |
| | Display Mode | | Up to 16 cameras can be displayed simultaneously on a multi-screen (Including the camera itself) |
| | Unit title | | Up to 20 characters |
| | Camera Title (OSD) | | Up to 20 characters (alphanumeric characters, marks) On/Off |
| | Clock Display | | Time 12H/24H, Date: 5 formats on the browser, Summer time (Auto/manual) |
| | Alarm Control | | Reset |
| | One Shot Capture | | A still picture will be displayed on a newly opened window |
| | GUI / Setup Menu Language | | English, French, Italian, Spanish, German, Russian, Chinese, Japanese |
| | System Log | | Up to 100 (internal) |
| | Supported OS *1 *2 | | Microsoft Windows 7<br>Microsoft Windows Vista<br>Microsoft Windows XP Professional SP3 |
| | Supported Browser | | Windows Internet Explorer 9.0 32 bit<br>Windows Internet Explorer 8.0 32 bit<br>Windows Internet Explorer 7.0 32 bit<br>Internet Explorer 6.0 SP3 |
| Network | Network IF | | 10Base-T / 100Base-TX, RJ45 connector |
| | Display Resolution | | H.264: VGA (640x480)/QVGA (320x240), max. 25 fps*<br>JPEG: VGA (640x480)/QVGA (320x240), max. 25 fps* ! *Dependent on Thermal Detector resolution |
| | H.264 *3 | Transmission Mode | Constant bitrate / Framerate priority / Best effort |
| | | Frame Rate | 1 / 3.1 / 4.2 / 6.25 / 8.3 / 12.5 / 20 / 25 fps |
| | | Bit Rate/Client | 64 / 128 / 256 / 384 / 512 / 768 / 1024 / 1536 / 2048 / 3072 / 4096 kbps |
| | | Image Quality | LOW / NORMAL / FINE |
| | | Refresh Interval | 0.2 / 0.25 / 0.33 / 0.5 / 1 / 2 / 3 / 4 / 5 s |
| | | Transmission Type | UNICAST / MULTICAST |
| | JPEG | Image Quality | 10 steps |
| | | Refresh Interval | 0.08 - 25fps (JPEG frame rate will be restricted when displaying both JPEG and H.264 images) |
| | | Transmission Type | PULL / PUSH |
| | Total Bit rate | | 64 / 128 / 256 / 384 / 512 / 768 / 1024 / 2048 / 4096 / 8192 kbps |
| | Supported Protocol | | IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMPv6<br>IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP |
| | FTP Client | | Alarm image FTP transmission, FTP periodic image transmission |
| | No. of Simultaneous Users | | Up to 14 users (depends on network conditions) |
| | Cellular Phone Compatibility | | JPEG image |
| | Mobile Terminal Compatibility *4 | | iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android mobile terminals |

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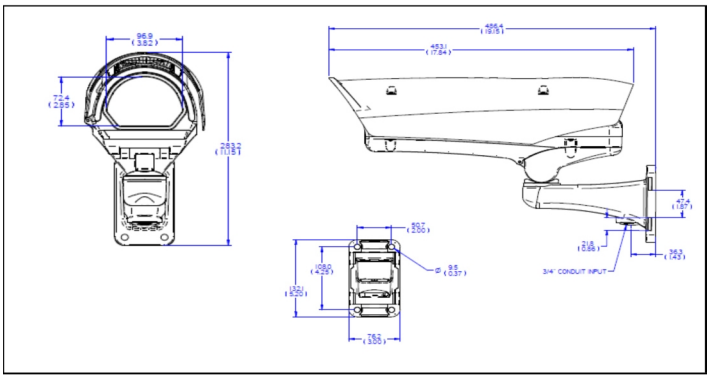
|---|---|---|---|
| Alarm | Alarm Source | | Video Motion Detection(VMD), Command alarm, Video loss alarm |
| | Alarm Actions | | Email Notification<br>Indication on browser, FTP image transfer, Panasonic protocol output |
| General | Safety/EMC Standard | | CE-EN55022 Class A, EN55024 |
| | Power / Network requirements | | PoE+ (IEEE802.3at) |
| | Dimensions | | 488mm x 161mm x 281mm (total dimensions including mount) |
| | Mass (approx.) | | 3.9Kg |
| | Construction | Body and Windshield | Polycarbonate |
| | | Mounting Bracket | Cast Aluminium |
| | | Window | Germanium Glass |
| | Mounting style | | Wall or pole |
| Environmental | Water Ingress / Corrosion Standards | | IP66 (dust and water ingress), NEMA 4X |
| | Operating Temperature Range | | -30°C to 55°C |
| | Humidity | | 0 to 95% relative |
| | Blower (internal) | | Yes, continuous |
| | Maximum windload | | 150mph (240kph) |

*1 For further information about PC System Requirements and precautions when using Microsoft Windows 7, Microsoft Windows Vista or Windows Internet Explorer, refer to the manual which can be found on our website (http://panasonic.net/pss/security/support/info.html)
*2 When using IPv6 for communication, use Microsoft Windows 7 or Microsoft Windows Vista
*3 Transmission for 2 streams can be individually set in the same compression method
*4 For further information about compatible devices, refer to our website (http://panasonic.net/pss/security/support/info.html)

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