Mini Dual Vision Thermal Networking Camera

3.46in

PWTC20F

The mini dual-vision thermal imaging camera is a product specially designed for real-time temperature monitoring of assets in close quarters, such as inside equipment cabinets. Offering both thermal and visual cameras in a compact, value-added package, the PWTC20F provides continuous temperature monitoring and alarm notification of critical electrical and mechanical equipment. The PWTC20F has a built-in HD visible camera, LED illuminator, and an infrared thermal imaging core to support 24H non-contact online temperature monitoring and visible inspection. It supports over-temperature alarms, and other functions.

The PWTC was designed to be compact and for ease of installation. Providing continuous monitoring for energy storage and generation, electrical cabinets, process and manufacturing areas, data centers, power distribution, and mass transit are only some of the applications this camera can provide situational awareness to a pre-fire condition and a maintenance situation.

Video Monitoring Preset Alarms – Availability of live streaming video provides the ability to perform visual inspections 24/7 from any remote location. The ability to define areas of interest and set pre-alarm temperature thresholds can send notification and/or initiate actions within the facility to mitigate the situation.
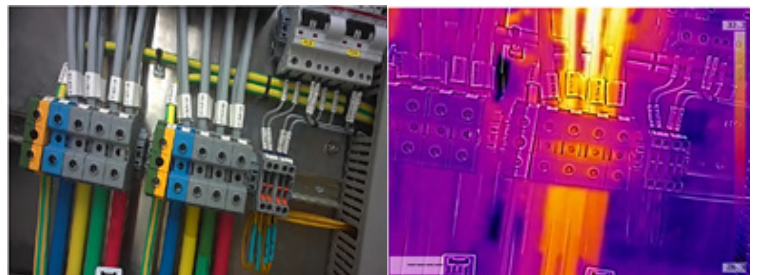
Versatility – The camera can fit into very confined areas with being approximately 3.5 inches (88.9mm) square 1.5 inches (38mm) thick. The connection to existing safety systems can be accommodated with multiple protocol options shown on the specifications located on the back page.

Camera Features

- High-resolution display technology for thermal and visible, thermal images provided at 640x480 resolution; and visual at 2560x1600

- 4MP visible camera with visible LED illuminator for dark environments

- Supports full screen temperature measurements

- Supports multiple temperature alarm criteria, such as: above range, below range, within range, and outside range

- Thermal imaging supported by 18 color palettes such as black & white hot, iron red and rainbow, etc.

- FOV for thermal is 57° horizontal and 44°. vertical Supporting good coverage for narrow cabinets and applications which the camera needs to be mounted close to the potential hazard.

- Analytics are running on the camera head, reducing loads on the server network.

- Supports ONVIF, MODBUS, FTP and other common protocols

- Restful API for easy integration

Applications

- Energy Storage Enclosures

- Energy generation and distribution

- Electrical cabinets

- Process and manufacturing areas

- Mission Critical Infrastructure

- Data centers

- Transportation and mass transit

- Storage facilities

CATEGORY		PARAMETERS
Thermal Camera	Sensor	Uncooled focal plane detector (9 Hz)
	Resolution/Pixel Size	160×120 / 12µm
	Response Waveband	8 to 14µm
	Minimum focus distance	10cm
	FOV	57°×44° or 95°×71° (without fusion)
	Palette	18 color palettes and fusion with visible
Visible Camera	Sensor	1/2.7in high performance CMOS
	Resolution	2592 x 1536
	Pixel	2MP
	Focal length	2mm
	Low light level	Color: 0.01 Lux @ (F1.5) Black and white: 0.001 Lux @ (F1.5)
	Image processing	Supports wide dynamic, white balance, digital noise reduction
	Visible illumination	Visible LED
Network	Network protocols	ICMP, TCP, UDP, RTP, RTSP, DHCP, PPPOE, UPNP, DDNS, ONVIF, etc.
	Simultaneous video streams	Up to 6
	Video compression	H.264/H.265
Image Stream	Maximum image resolution	1920×1080 @ 30fps (visible), 640×480 @ 30fps (thermal)
	Main stream image (resolution/frame rate)	Visual: 2592×1536 with 1080P or 720P configurations, Thermal: 640×480
	Sub stream image (resolution/frame rate)	Visual: D1 or CIF configurations, Thermal: 640×480 or 320×240
Functions	Temperature measurement range	Low temperature range: -10 to 150 °C High temperature range: -10 to 450 °C
	Temperature accuracy	±2°C or ±2%, whichever is greater*
	Temperature measurement	Supports point, line and area regional measurements, full screen measurements and area shielded regions.
	Temperature alerts	Temperature range rules: above, below, within, and outside. Supports area temperature comparison.
	Image fusion	Supports multiple fusion modes of visible light and infrared (fusion/full- color/HD/HD-fusion). Note: fusion mode is not supported with the 95° FOV
	Image flip	Supports horizontal and vertical flip
	Smart functions	Fire point & intensity, line crossing, area entrance & exiting alarm
System Integration	Communication interface	RJ45 10M/100M self-adaptive
General	Working ambient	Working temperature -10 to +60 °C; Working humidity ≤95% non-condensation
	Power supply / Consumption	DC24V / POE , ≤5W
	Dimension (L×W×H), Weight	3.62in x 3.46in x1.5in, 0.75 Lbs. (92mm x 88mm x 38mm, 340g)

Disclaimer: Specifications subject to change without notice.
*Laboratory test data at room temperature