



The ICI DetectIR PTZ 640 is a state-of-the-art IR monitoring solution that combines advanced technology, rugged construction, and versatile features. It is a cutting-edge dual-spectrum imaging system equipped with both visible and thermal imaging capabilities, and housed in a robust IP66-rated PTZ enclosure featuring multiple waypoint patrols with custom thermal alarming. Paired with SmartIR Edge and Cloud software solutions, it excels in detecting asset condition anomalies, environmental hazards, fires, and area intrusions to optimize condition monitoring and facility safety.

Features

- 24/7 asset condition and safety monitoring
- Dual-spectrum imaging (visible + thermal)
- Medium/long distance observation
- Alarm threshold settings with the ability to record, capture, and send notifications on alarm
- Smart alarms to prevent illegal access, IP address conflicts, and notify users of network disconnections
- Helps prevent line, region, and border intrusions
- Night vision and visualization during bad weather
- Accurate detection of environmental hazards or fire
- High speed, continuous 360° pan to monitor large areas with ease and precision
- Network support for video transmission
- Stream up to 20 channels
- ONVIF/GB28181/SDK support

Applications

- Industrial Asset Monitoring
- Early Fire Detection
- Tank Level Monitoring
- Liquid Leak Detection
- Security Monitoring
- Building Security
- Low Light Surveillance



DetectIR PTZ 640

Specifications

Thermal Camera:

- **Pixel Resolution:** 640 x 512
- **Accuracy:** $\pm 2^{\circ}\text{C}$ ($\pm 3.6^{\circ}\text{F}$) or $\pm 2\%$
- **Operation Range:** -40°C to 70°C (-40°F to 158°F)
- **Storage Range:** -20°C to 70°C (-4°F to 158°F)
- **Detector Array:** UFPA (VOx)
- **Spectral Range:** 8 μm to 14 μm
- **Pixel Pitch:** 12 μm
- **Focus:** auto/manual/one-shot auto
- **Pan/Speed:** 360° Continuous Rotate; 0.1°~100°/s
- **Tilt/Speed:** -90° ~ $+40^{\circ}$; 0.1°~60°/s
- **Measurement Distance:** 0.5 m - 4 m, step size 50 cm (1.6' - 13.12'; step size 9.84")
- **Spectral Band:** 8 μm to 14 μm
- **Thermal Sensitivity (NETD):** < (40 mK) 0.04°C at 30°C (86°F)
- **Frame Rate:** 25 Hz
- **Humidity:** $\leq 90\%$, relative
- **Pixel Operability:** > 99 %
- **Dimensions (without lens):**
250 mm x 472 mm x 360 mm (L x W x D ± 0.5 mm)
(9.84" x 18.58" x 14.17" (L x W x H ± 0.02 ""))
- **Weight:** 14 kg (30.86 lbs)
- **Power:** 24V DC; 75W
- **Interface:** RJ45 Ethernet 10M/100M; audio: 1channel input, 1 channel output; alarm: 7-channel input, 2-channel output; 1-channel RS485
- **Protocols:** TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTP, RTSP, RTCP, IGMP, SMTTP, NTP, QoS
- **Browser:** IE8+, multi-language
- **Live Streaming:** up to 20 channels
- **Video:** Up to 20users; 2 levels: Administrator and User
- **Video:** 2688x1520 (Visible); 1280x1024 (Thermal)
- **Video Format:** H.264/H.265/MJPEG
- **Image Polarity:** 20 options
- **Scan Modes:** Preset/Pattern Scan/Patrol, Scan/Linear, Scan/Panorama Scan
- **Memory:** Micro SD (up to 256 GB)
- **IP Rating:** IP66; TVS 6000V Lightning Protection; Surge Protection; Voltage Transient Protection; Conform to GB/T17626.5 Grade-4 Standard

Digital Camera:

- **Pixel Resolution:** 2688x1520, 4 MP
- **Detector Array:** 1/1.8in CMOS
- **Focus:** auto/manual/one-shot auto
- **Focal Length:** 6.5~240mm
- **FOV:** 61.8°x37.2°~ 1.86°x1.05°

Lens Options

Focal Length	F#	FOV (HxV)	IFOV
25 mm-75 mm	F0.95~F1.2	17.5°x14.0°~5.9°x4.7°	1.077 mrad
75 mm	F1.0	5.9°x4.7°	0.737 mrad
100 mm	F1.2	4.4°x3.5°	0.560 mrad