

# Explosion Proof Dual Sensor Thermal Imaging & CMOS PTZ Camera

LY-EX-TPC-01-IR

## Main Features:

- **All In One Dual Sensor Thermal Imaging & CMOS PTZ Camera System**
- **CMOS Camera: 2MP/1080P, 2507 Hikvision Network Camera Module**
- **Camera Lens: 4.8-120mm, 25X Optical Zoom, 12X Digital Zoom**
- **Thermal Imaging Camera: 400(H) ×300(V), Support Max 128GB Storage**
- **With 8mm fixed lens, 15/25/35/50/75mm is optional.**
- **Pixel Space: 17μm, Respond Band: 8~14μm, NETD: 40mK@F1.0, Frame Frequency output: 50/60Hz**
- **Using High Quality 304 Stainless Steel Material, 316 & 316L for Option**
- **Explosion-Proof Mark: Exd IIC T6 Gb/ Ex tD A21 IP68 T80°C**
- **Support ONVIF protocols, can be seamlessly integrated into the Hikvision backend devices.**



## Dual Channel Thermal Imaging & CMOS PTZ Camera

Explosion-proof performance in accordance with GB3836.1-2010 "Explosive atmospheres --Part 1: Equipment-- General requirements", GB3836.2-2010 "Explosive atmospheres --Part 2: Equipment protection by flame-proof enclosures "d" ", GB12476.2-2013 "Electrical apparatus for use in the presence of combustible dust-- Part 1: General requirements", GB12476.2-2013 "Electrical apparatus for use in the presence of combustible dust-- Part 5: Protection by enclosures "tD", made of Explosion-Proof structure.

### Main Features:

\* All in one dual sensor thermal imaging & CMOS PTZ camera system which with a multi-channel, multi-sensor PTZ surveillance function.

#### \* CMOS camera solution:

- 1.2MP/1080P, Hikvision 2507 HD network camera module
- 2.Lens: 4.8~120mm,Auto Zoom,25X optical zoom,12X digital zoom
- 3.IR work distance up to 100M

#### \* Thermal Imaging camera Solution:

- 1.Camera resolution 400(H) ×300(V), support max 128GB storage.
2. With 8mm fixed lens, 15/25/35/50/75mm is optional.
3. Adopting the Uncooled IRFPA Microbolometer detector ,with temperature measure and over temperature alarm functions ,temperature range:-40~150°.
- 4.Pixel space: 17μm,Respond Band: 8~14μm, NETD: 40mK@F1.0, Frame frequency output: 50/60Hz.

\* With realtime H.265/H.264/MJPEG Encoding.

\* Support HTTP, TCP/IP,DNS,DDNS,PPPOE and others protocols.

\* SDK for second development, preview via IE browser.

\* The camera is made of high-quality 304 stainless steel, anticorrosive and explosion-proof, waterproof, dust proof,IP68, Used in corrosive environment such as strong acid and alkali.

\* With windshield wiper and sun-shading cover design.

\* Accept the camera customization, includes camera lens , camera resolution, camera work distance, camera types and so on. (Hikvision, Dahua,Uniview, XM, Tiandy ,Seetong and other brands for option).

### Application Environment:

With flammable gas of IIA, IIB, IIC, the ignition temperature group is zone 1 and zone 2 of T1-T6 group, places where flammable gas or explosive mixture of vapor and air is formed; it is also applicable to the 21 zone and 22 zone of the T1-T6 group of ignition temperature, places containing combustible dust mixtures, such as: petroleum, chemical industry, mines, military industry, medicine, oil depots, ships, drilling platforms, gas stations, natural gas stations, gas stations, fireworks production, food processing and storage, etc.

### Ex Proof Thermal Imaging and CMOS PTZ Camera Datasheet:

Model	LY-EX-TPC-01-IR
Camera Type	Dual Channel Thermal Imaging & CMOS PTZ Camera
Material	High quality 304 stainless steel (316,316L is optional)
EX Plosion Marks	Ex dIIC T6 Gb/ Ex Td A21 IP68 T80°C
<b>Thermal Camera Parameter</b>	
Thermal Imaging Detector	Uncooled IRFPA Microbolometer
Induction Method	Microbolometer
Resolution	400(H) ×300(V)
Pixel Spacing	17μm
Respond Band	8~14μm
NETD	40Mk/F1.0
Lens	Athermal fixed lens 8mm (15/25/35/50/75mm is optional)
Palette	9 color standards (can be customized)
DVE Image Enhancement	Multi-levels can be continuously adjustable
Mirror Image	Horizontal/Vertical/Horizontal + Vertical
Noise Reduction	Auto/ Manual 2D,3D
Correction Function	Auto/Manual/External
OSD Display	Temperature ,time ,date, channel no, channel name ,support to redefine
Video Format	H.265/H.264/MPEG
Video Bitrate	Main stream: 100Kbps~6Mbps; Sub Stream:10Kbps~1500Mbps
SNR	55dB
Image Setting	Brightness ,contrast

Temperature Measurement	Point & line & polygon area, full screen temperature measurement
Temperature Measurement Alarm	Over temperature alarm ,temperature difference alarm
Temperature Measurement Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$
Multi-Targets Temperature Measurement Detection	Support
Temperature Measurement Respond Time	$\leq 30\text{ms}$
Recommend Environment	$-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Temperature Measure Range	$-40^{\circ}\text{C} \sim 150^{\circ}\text{C}$
Temperature Measure Display Mode	Assigned position/Tracing area/Turn off
Internet Protocols	IPv4/IPv6 ,HTTP, HTTPS,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, SIP ,802.1x,DDNS,PPPoE,FTP,SNMP,QOS
Access Protocols	ONVIF
Internet Interface	RJ45 100/1000
Alarm Interface	Support 1 channel switch value alarm output
PTZ Control Interface	RS485
SD Card Interface	Micro SD/HCS D Card ,Max support 128GB
Time Sharing Arrangement	Support
Storage Methods	Local storage, NAS Storage, SD card storage
Privacy Masking	5 PCS Areas, size of the area is adjustable
SDK Development	Linux C /windows , C&C++SDK
Glass Window	Customized germanium glass ,front of the camera shield with steel mesh for protection
<b>Network Camera Parameter</b>	
Camera Solution	Hikvision 2507 camera module,
Camera Resolution	1920*1080, 2MP/1080P
Zoom Length	4.8-120mm, 25X Optical Zoom, 12X Digital Zoom
Horizontal Field	57.6-2.5
Zoom Mode	Auto/Manual/Self-Auto
Image Quality Adjustment	Brightness, contrast ratio, sharpness, saturation is adjustable
Video Compression	H.265/H.264
Intelligent Alarm	Motion detection ,masking alarm, memory full ,memory error, audio abnormal detection, crossing the line detection ,area intrusion detection

Interface Protocols	ONVIF,ISAPI,SDK
Standard of Glass Window	Explosion glass,with windshield wiper
<b>PTZ Parameter</b>	
Horizontal Rotation Range	360° Continuous Rotation
Vertical Rotation Range	+90° ~ -90°
Horizontal Rotation Speed	1°~20°/S
Vertical Rotation Speed	1°~20°/S
Presets	255
Auto Scan	1PCS
Cruise Scan	8 PCS, Each Cruise Scan with 16 pcs patrol point
Watch Position	Support
Power Off Memory	Support
Ratio Zoom	Support
PTZ Communication Interface	RS-485
PTZ Communication Protocols	Pelco-P/Pelco-D Auto-Adapting
Baud Rate(bps)	1200/2400/4800/9600/19200
Zero Point Calibration	Support
Infrared Function	Infrared light can be adjustable automatically, IR distance up to 100M
<b>Others</b>	
Electrical Connection	Composite Cable
Supply Voltage	AC100V~240V
Work Current	≤ 2A
Work Temperature	-10°C~+60°C
Atmospheric Pressure	86~106KPa
Relative Humidity	≤95%RH (+25°C)
Product Dimension	L470*W330*H420mm
Cable Entry	G 3/4 " * 1 (or G 1/2 ")
Product Weight	≤30Kg
Installation	Fixed bracket

(The above camera solution is using Hikvision 2MP Camera Module, other solution is available for option in our company)

**Remarks:** One model may with multi-versions and several configurations, for final product details, please confirm with the sales staff directly.

**Product Images:**



**Product Dimension:**

