VidoNet

VTC-S41-IR-37X

AI PTZ

4MP 37X Starlight IR Network PTZ Camera
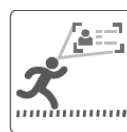
Smart Tracking	Starlight	True WDR	VCA
3D DNR	PoE++	IP67	H.265
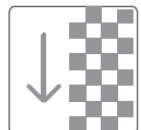
CE FC

VTC-S41-IR-37X

System

VTC-S41-IR-37X which adopts 1/1.8″ progressive CMOS sensor, 37x optical zoom lens and accurate gimbal, could monitor wide open area with great details, such as rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations and large venues. It can recognize human faces or car license plate at 557m away or detect human body at 2.6km away. This model adopts an advanced zoomed VCSEL illuminator, synchronously match lens angle and illumination beam, which improves human face detection range to 500m at night, and brings more uniform and transparent B/W image. Even in the near complete darkness, this illuminator could light up human faces at 500m away. This camera adopts the latest ISP, which delivers excellent picture quality. At most time, the camera outputs vivid colorful image without necessary of switching to B/W mode. It supports facial priority, car lamp priority exposure, auto-gain control for better VCA results. 1.0T CNN deep-learning engine supports faces/vehicle detection &classification, perimeter precaution and auto-tracking functions.

With full metal shield, built-in heater and cool fan, it even could cold start at -40℃; due to its IP67 Ingress Protection rating and Ik10 impact test, 6KV lightning rating, this product could work well in harsh weather, such as islands, desert areas, ice-plain, and so on. VTC-S41-IR-37X is enhanced with an additional electric rain-wiper.
The camera conforms to the ONVIF specifications, ensuring interoperability between network video products regardless of manufacturer.

Key Spec:

- 1/1.8″ progressive scan CMOS
- Up to 2560x1440 resolution
- Mini illumination:
    Color: 0.005 lux @ (F1.5 AGC ON)
    B/W: 0.001lux@ (F1.5 AGC ON)
    0 Lux with IR
- 37x optical zoom, 16x digital zoom
- 120 dB WDR, 3D DNR, Smart IR

- Up to 500m zoomed VCSEL IR distance
- Smart H.265/H.264 video compression
- 1.0 Tops Deep-learning Engine
- Smart tracking of human/vehicle
- Smart detection and perimeter precaution
- Metal Body, IP67,-40°C~65°C,-40°C cold start
- PoE++ and DC/AC24V

Application:

Outdoor harsh weather, wide range area intrusion, perimeter protection, such as rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations and large venues.

SPECIFICATION:

| Camera Module	
System	Hi3516DV300,2GB LPDDR3, 4GB EMMC, product active till Dec,2022
Image sensor	1/1.8″ progressive scan CMOS
Mini. Illumination	Color：0.005 Lux @ (F1.5，AGC ON)；B/W：0.001 Lux @(F1.5，AGC ON); 0Lux with IR
Image setting	Flip, Mirror, Saturation, Brightness, Contrast, Sharpness, AGC, and AWB adjusted by client software/browser
Shutter Speed	1/1 s – 1/10,000 s
White Balance	Auto/Manual/Indoor/Outdoor
Gain	Auto/Manual
Day & Night	IR Cut filter
Digital Zoom	16x
Privacy Mask	4 Programmable privacy masks
3D DNR	Auto/Manual
BLC	Yes
HLC	Yes
WDR	120 dB
Defog	Electronic
Regional Exposure	No
Picture overlay	Logo picture could be overlaid on video with 128x128pixels,24bits BMP format
Lens	
Focus length	f=5.6 ~ 208 mm lens,37x optical
Zoom Speed	Approx. 4.4s (optical zoom, wide-tele)
Field of View	Horizontal:59.8° to 2.3°(wide-tele); Vertical: 33.6° to 1.3°(wide-tele); Diagonal: 68.6° to 2.6°(wide-tele)
Working distance	wide: 1.0m ~ INF; tele: 1.5m ~ INF
Aperture Range	F1.55 ~ F4.5 (wide-tele)
PTZ	
Pan Range	360°endless
Pan speed	Configurable, from 0.1~180°/s; Preset speed: 180°/s
Tilt Range	From -20° to 180° （auto-flip at 90°）
Tilt Speed	Configurable, from 0.1°~ 150°/s, Preset speed: 150°/s
Proportional Zoom	Yes
Preset	300
Cruise	8 cruises, up to 16 presets for each cruises
Trace	4 traces, record time over 3 minutes for each trace
Power off memory	Support
Action mode	Preset/Cruise/Trace/Auto Scan/Random Scan
3D Positioning	Support
PTZ Position Display	Support
Schedule Task	Preset/Cruise/Trace/Random Scan/Boundary Scanning /Dome reboot
IR	
IR Distance	500m (1640 f.t.),Zoomed VCSEL illuminator,2.6° to 70° beam
Smart IR	Yes
Network	

Max Resolution	2560×1440
Main stream	2560×1440,2048×1536,1920×1080,1280×720 （25/30fps）
Sub stream	25fps (704 × 576, 480 × 240,352 × 288) ; 30fps (704 × 480, 480 × 240, 352 × 240)
Third Stream	25fps (704 × 576, 480 × 240,352 × 288) ; 30fps (704 × 480, 480 × 240, 352 × 240)
SVC	Yes
Video compression	Smart H.265/H.264/MJPEG
Audio compression	G.711 A/U
Audio Enhancement	No
Protocols	HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP,DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP,DHCP, PPPoE
Simultaneous live view	Up to 6 channels
User / Host	Up to 16 users, 3 levels: Administrator, Advanced User and Normal User
Security Measures	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption, IEEE802.1x port-based network access control; IP address filtering
Smart Features	
Basic event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, SD full, SD error)
Face recognize /compare	Default off, Max 30 human faces per second.
People density / LPR	Not support by this software version.
Smart Detection	Intrusion detection, Line crossing detection, Region entrance/exiting detection, Unattended baggage detection, Object removal detection, Scene change detection, Support alarm triggering by human or vehicle, filtering flag/animal.
Smart Tracking	Manual Tracking, Auto Tracking (human or vehicle)
System Integration	
Alarm Interface	7CH alarm input; 2CH alarm output
Audio Interface	1CH audio input, 2 to 2.4v[p-p] 1KΩ ±10%; 1CH audio output (line out), impedance: 600Ω
Alarm Linkage	Alarm actions, such as Preset, Cruise, Track, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card, Send Email, etc.
Network Interface	1 RJ45 10M/100M Adaptive Ethernet (Support PoE 802.3.bt,class 7)
CVBS	Yes, 1 BNC connector
RS 485	Pelco-D / P protocol, custom protocols available
Storage	One Memory card slot, support microSD/SDHC/SDXC, up to 256G
API	ONVIF, support SDK and third-party management platform
Client	N9000 1.4.5, NVMS 2.0; and the third-party client
Web Browser	IE(8-11); Firefox(ver44 and early);Chrome(ver76 and early); Not support Safari
General	
Power	AC24V, DC24V,PoE++ (802.3.bt, class 7), (Max 50W, include IR on, Heater on, Fan working)
Working condition	-40°C ~ 65°C (-40°F ~ 149°F),90%RH less (non-condensing),Cold start at - 40°C
Storage condition	-40°C ~ 70°C ; ≤ 95% RH
Protection	IP67, IK10,6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Material	Aluminum Alloy
Dimensions	⌀278mm x H 435mm(⌀10.94" x 17.12")
Weight	Approx. 8.8 Kg (19.4 lb.)
Certification	IP67,IK10,ROHS,CE, FC Laser Eye Safety Certification(CE,FDA,IEC2017)

DORI table

It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect (human behaviours)	Observe (as Court level evidence)	Recognize (face ID, CPL)	Identify (human and his photo)
Define	25Pixels/meter	63Pixels/meter	125Pixels/meter	250pixels/meter
Distance	2786m(9140 f.t.)	1105m（3625 f.t.）	557m(1827 f.t)	278 m (912 f.t.)

Dimensions:

38.5mm(1.5")
397mm (15.6")
343.5mm (13.5")
Φ238mm(9.4")
Φ278mm(10.9")
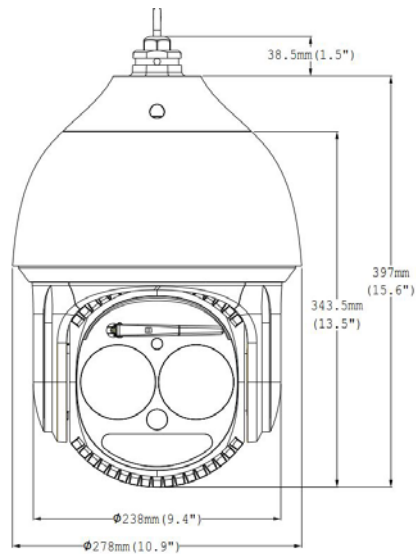
Unit: inch/mm

Mounting Brackets Options：

VTC-YZJ0306 Wall mount	VTC-YZJ0305+YZJ0501 Pole Mount	VTC-YZJ0305+YZJ0601 Corner Mount	VTC-YZJ0807 Pendant mount

Ordering information

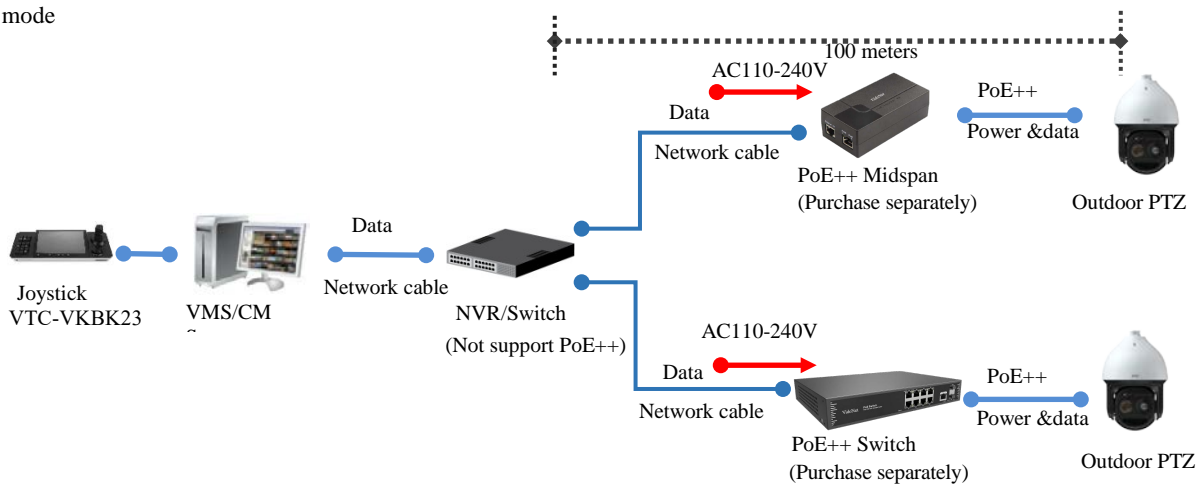|		
Camera	VTC-S41-IR-37X	4MP 37X Ultra starlight laser 500m Network PTZ camera, smart tracking,AC24V/DC24V/PoE++, IP67,-40℃~65℃, including wall mount bracket and power adaptor. Without rain-wiper
	VTC-S41-IR-37X(Optional)	4MP 37X Ultra starlight laser 500m Network PTZ camera, smart tracking,AC24V/DC24V/PoE++, IP67,-40℃~ 65℃,　including wall mount bracket& power adaptor. With rain-wiper

Connection Options：

● **Legacy connection mode**

Joystick K23 — VMS/CMS — Data — Network cable — NVR/Switch （not support PoE++） — 100 meters — Data — Network cable — Outdoor PTZ — Power AC24V — MKAC-66-243000U(USA) MKAC-66-243000V(EU) MKAC-66-243000VB(UK) (Supplied) — AC110-240V
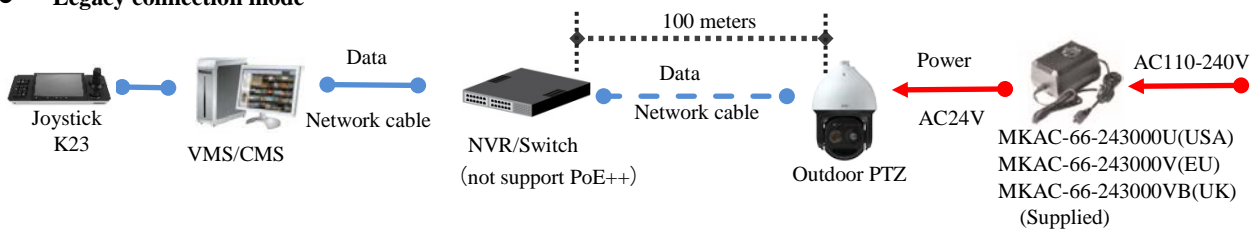
● **PoE++ Mode**

VidoNet has only PoE+ class NVR(802.3.at), it need 3rd party PoE++ Midspan or Switch for PoE++ mode

Joystick VTC-VKBK23 — VMS/CMS — Data — Network cable — NVR/Switch (Not support PoE++)

100 meters — AC110-240V — Data — Network cable — PoE++ Midspan (Purchase separately) — PoE++ Power &data — Outdoor PTZ

AC110-240V — Data — Network cable — PoE++ Switch (Purchase separately) — PoE++ Power &data — Outdoor PTZ

*All accessories listed here have been tested for compatibility, other vendors are not guaranteed.

* All pictures and texts are for reference only. Actual product may vary due to product enhancement.