

VKD TC 2051D

2MP Starlight HDCVI Box Camera

HDCVI



- · Starlight, 120dB true WDR, 3DNR
- · Max 30fps@1080P
- · HD and SD dual-output
- · C/CS lens
- · AC24V/DC12V











System Overview

Experience full HD 1080P video and complete features with the simplicity of using existing coaxial infrastructure. The starlight HDCVI camera presents high quality image with rich details even under extreme lowlight environment and supports 120dB true WDR. It offers various auto-iris lens models with multi-language OSD and multi-interfaces including HD&SD video, audio and alarm, all come with elegant case design. The superior image performance and project-oriented features make the Ultra series HDCVI camera an ideal choice for mid to large-size business and projects in all industries.

Functions

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

* Audio input is available for some models of HDCVI cameras.

Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 800m for 1080P Full HD video via coaxial cable, and up to 300m via UTP cable.*

stActual results verified by real-scene testing in Dahua's test laboratory.

Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

Starlight

With the adoption of high performance sensor, the camera is able to provide incomparable performance even under extreme lowlight environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Multi-interfaces

The camera is designed with multi-interfaces for transmitting/receiving various signals. It supports HDCVI and CVBS video outputs simultaneously with two BNC connectors, and tester out interface for debugging. It also supports audio input interface as well as alarm input/output for connecting external devices. Multi-interfaces covers different requirements of monitoring scenes and facilitates deployment and construction.

Protection

Supporting $\pm 25\%$ input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Elegant Design

As projected-oriented product, the camera adopts elegant appearance design to express feeling of high reliability for industrial grade application.

Ultra Series | VKD TC 2051D

Camera Image Sensor 1/2.8" CMOS Effective Pixels 1945(H)x1097(V), 2.1MP Scanning System Progressive Electronic Shutter Speed PAL: 1.3s~1/30000S NTSC: 1s~1/30000S Minimum Illumination 0.005Lux/F1.2 (Color), 0.0005Lux/F1.2 (B/W) S/N Ratio More than 65dB IR Distance N/A IR On/Off Control N/A IR LEDs N/A Lens V Lens V Lens V Mount Type C/CS Focal Length N/A Mount Type C/CS Focal Length N/A Max Aperture N/A N/A N/A Focus Control Auto / Manual Close Focus Distance N/A Pan / Tilt / Rotation N/A Pan/Tilt/Rotation N/A Pan/Tilt/Rotation N/A Prame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output 2-channel BNC LOVES video output	Technical Specification	
Effective Pixels 1945(H)×1097(V), 2.1MP Scanning System Progressive Electronic Shutter Speed PAL: 1.3s~1/30000s Minimum Illumination 0.005Lux/F1.2 (Color), 0.0005Lux/F1.2 (B/W) S/N Ratio More than 65dB IR Distance N/A IR On/Off Control N/A IR LEDs N/A Lens Lens Lens Type C/CS lens / Auto iris Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC VIDE Video output & 1-channel BNC CVBS video output	Camera	
Scanning System Progressive Electronic Shutter Speed PAL: 1.3s~1/30000s Minimum Illumination 0.005Lux/F1.2 (Color), 0.0005Lux/F1.2 (B/W) S/N Ratio More than 65dB IR Distance N/A IR On/Off Control N/A IR LEDS N/A Lens Lens Lens Lens Type C/CS lens / Auto iris Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Pan / Tilt / Rotation N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC LVI high definition video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Image Sensor	1/2.8" CMOS
Electronic Shutter Speed RYSC: 1s~1/30000s Minimum Illumination 0.005Lux/F1.2 (Color), 0.0005Lux/F1.2 (B/W) S/N Ratio More than 65dB IR Distance N/A IR On/Off Control N/A IR LEDs N/A Lens Lens Lens Lens Type C/CS lens / Auto iris Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Pan / Tilt / Rotation N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 8.1-channel BNC HDCVI high definition video output 8.1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Advance Auto / Manual	Effective Pixels	1945(H)×1097(V), 2.1MP
Minimum Illumination 0.005Lux/F1.2 (Color), 0.0005Lux/F1.2 (B/W) S/N Ratio More than 65dB IR Distance N/A IR On/Off Control N/A IR LEDs N/A Lens Lens Type C/CS lens / Auto iris Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output & 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Scanning System	Progressive
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Lens Type C/CS lens / Auto iris Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Pan / Tilt / Rotation Pan/Tilt / Rotation N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 25/30fps@1080P, 25/30/50/60fps@720P Video Output 31-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D/3D White Balance Auto / Manual	IR LEDs	N/A
Mount Type C/CS Focal Length N/A Max Aperture N/A Angle of View N/A Focus Control Auto / Manual Close Focus Distance N/A Pan / Tilt / Rotation Pan/Tilt/Rotation N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output & 1-channel BNC CVBS video output BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Lens	
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Pan/Tilt/Rotation N/A Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Close Focus Distance	N/A
Video Resolution 1080P (1920×1080) Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Pan / Tilt / Rotation	
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Frame Rate 25/30fps@1080P, 25/30/50/60fps@720P Video Output 1-channel BNC HDCVI high definition video output & 1-channel BNC CVBS video output Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Video	
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Day/Night Auto (ICR) / Manual OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
OSD Menu Multi-language BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Video Output	
BLC Mode BLC / HLC / WDR WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	Day/Night	Auto (ICR) / Manual
WDR 120dB Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	OSD Menu	Multi-language
Gain Control AGC Noise Reduction 2D / 3D White Balance Auto / Manual	BLC Mode	BLC / HLC / WDR
Noise Reduction 2D / 3D White Balance Auto / Manual	WDR	120dB
White Balance Auto / Manual	Gain Control	AGC
	Noise Reduction	2D/3D
Smart IR N/A	White Balance	Auto / Manual
	Smart IR	N/A

Certifications	
Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
Interface	
Audio Interface	1-channel audio in
Alarm Interface	2-channel alarm in & 1-channel alarm out
Eelectrical	
Power Supply	AC 24V±25% / DC 12V±25%
Power Consumption	Max 4.7W (12V DC, IR on)
Environmental	
Operating Conditions	-30°C $^{\sim}$ +60°C (-22°F $^{\sim}$ +140°F) / Less than 90% RH * Start up should be done at above -30°C (-22°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection &Vandal Resistance	N/A
Construction	
Casing	Aluminium
Dimensions	135.4mm×74.4mm×65.5mm (5.33"×2.93"×2.58")
Net Weight	0.49kg (1.08lb)

0.60kg (1.32lb)

Gross Weight

Ordering Information				
Туре	Part Number	Description		
2MP Camera	VKD TC 2051D	2MP Starlight HDCVI Box Camera, PAL		
Accessories	PFB110W	Wall/ceiling/plane mount (For use alone)		
	PFB121W	Wall mount (For use alone)		
	PLZ1040-D	4MP 2.7-12mm Lens		
	PLZ1140-D	4MP 5-50mm Lens		
Accessories				

135.4 [5.33*] 125 [4.92*] 74.4 [2.93*]

Optional:







PFB110W Wall/ceiling/ plane mount

PFB121W Wall mount

PLZ1040-D Lens



PLZ1140-D Lens

Wall Mount	Ceiling Mount
PFB121W	PFB110W