

# TDIDIS510F

5MP Panoramic Network IR Fisheye Camera



- 1/2.7" 5Megapixel progressive scan STARVIS™ CMOS
- H.265/H.264 triple-stream encoding
- Max 25fps@5M(2592×1944)
- Multiple dewarped Mode
- Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Smart detection
- Intelligent Function
- Max. IR LEDs length 10m
- Micro SD memory, PoE



## System Overview

TOUGHDOG fisheye camera is an expert at panoramic surveillance with low-profile design. With a fisheye lens, the camera can provide a high quality 180° or 360° panoramic views without blind spots, making it ideal for wide and open areas, such as airports, shopping malls, banks, hotels, stores, offices and more. The camera can offer different views including 360° overview and dewarped views such as panorama view, double views and quad views.

## Functions

**Smart Codec (H.265+ & H.264+)** Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

### True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

### Panoramic

Panoramic cameras provide 180°, 360° full range of video scene, bringing people a new sense of real live and interactive experience. TOUGHDOG provides two kinds of panoramic camera, single lens fisheye camera and multi-lens camera, both of them can offer 180-degree & 360-degree panoramic image. Through working together with PTZ camera which offer whole scene and region details at same time. It provided new surveillance experience to end user and improved the surveillance quality.

## Wide Dynamic Range

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

## Business intelligent analysis (Heatmap)

TOUGHDOG fisheye camera also supports advanced intelligent feature like heat map besides basic IVS functions. The heatmap function can be applied to business intelligence and bring extra values to customers. The heat map function based on a moving object in time of space movement for analysis, find the most active area and output the report, which is to provide valuable data support for commercial applications.

## Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 10m (33ft).

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## Technical Specification

### Camera

Image Sensor	1/2.7" 5Megapixel progressive scan CMOS
Effective Pixels	2592(H)x1944(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.006Lux/F2.0( Color,1/3s,30IRE) 0.02Lux/F2.0( Color,1/30s,30IRE) 0Lux/F2.0(IR on)
IR Distance	Distance up to 10m(33ft)
IR On/Off Control	Auto/ Manual
IR LEDs	3

### Lens

Lens Type	Fixed			
Mount Type	Board-in			
Focal Length	1.4mm			
Max. Aperture	F2.0			
Angle of View	H: 180°, V:180°			
Optical Zoom	N/A			
Aperture type	Fixed			
Close Focus Distance	N/A			
DORI Distance	Detect	Observe	Recognize	Identify
	28m(92ft)	11m(36ft)	6m(19ft)	3m(9ft)

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	N/A
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### Intelligence

IVS	Tripwire, Intrusion
Advanced Intelligent Functions	Heat Map

### Video

Compression	H.265/H.264/H.264H/MJPEG(Sub Stream)
Smart Code	Support H.265+/H.264+
Streaming Capability	3 Streams
Resolution	5M(2582x1944)/ 3M(2048x1536)/ UXGA(1600x1200)/ 1.3M(1280x960)/ 1080P(1920x1080)/ 720P(1280x720)/ D1(704x576/ VGA(640x480)/ CIF(352x288)
Frame Rate	Main Stream: 5M(1~25fps)
	Sub Stream: D1(1 ~ 25/30fps)
	Third Stream: D1(1 ~ 10/17fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265: 3Kbps~ 4096Kbps H.264: 3Kbps~ 4096Kbps

Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization(EIS)	N/A
Smart IR	Support
Defog	N/A
Digital Zoom	16x
Flip	N/A
Mirror	N/A
Privacy Masking	Off / On (4 Area, Rectangle)

### Audio

Compression	G.711a/G.711Mu/PCM
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### Network

Ethernet	RJ-45 (100/1000Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; RTMP
Interoperability	ONVIF, CGI, API
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

### Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
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### Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out, 1 Built-in Mic
RS485	N/A
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC

### Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	DC12V: 2.7W 8.2W(IR on) PoE: 3.3W 10.1W(IR on)

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## Environmental

Operating Conditions	-10° C ~ +50° C (14° F ~ +122° F) / Less than 95% RH
Storage Conditions	-10° C ~ +50° C (14° F ~ +122° F) / Less than 95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

## Construction

Casing	Metal+Plastic
Dimensions	Φ126.2mm×44.7mm(Φ4.9"×1.8")
Net Weight	0.28kg(0.6lb)
Gross Weight	0.41kg(0.9lb)

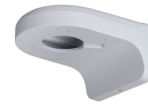
## Ordering Information

Type	Description
5MP camera	5MP Panoramic Network IR Fisheye Camera, PAL
	5MP Panoramic Network IR Fisheye Camera, NTSC
	5MP Panoramic Network IR Fisheye Camera, PAL
	5MP Panoramic Network IR Fisheye Camera, NTSC
Accessories (optional)	Wall Mount
	Pole Mount
	Ceiling Mount

## Accessories



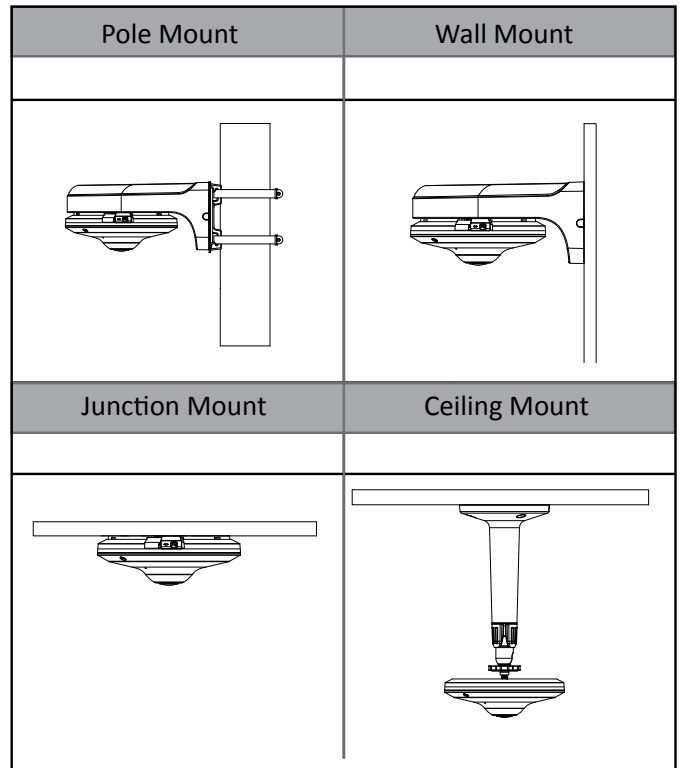
Pole Mount



Wall Mount



Ceiling Mount



## Dimensions (mm/inch)

