

# DIREKTRONIK

## 4K POE IP Underwater Camera for Aquaculture and Underwater Inspection

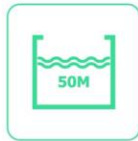


industrial 4K POE underwater camera designed for underwater inspection and aquaculture applications, featuring 4K Ultra HD resolution and remote access via WEB and Mobile App.

### Outstanding Features



Light Control



Deep Water



4K Resolution



POE



Remote Access



Onvif

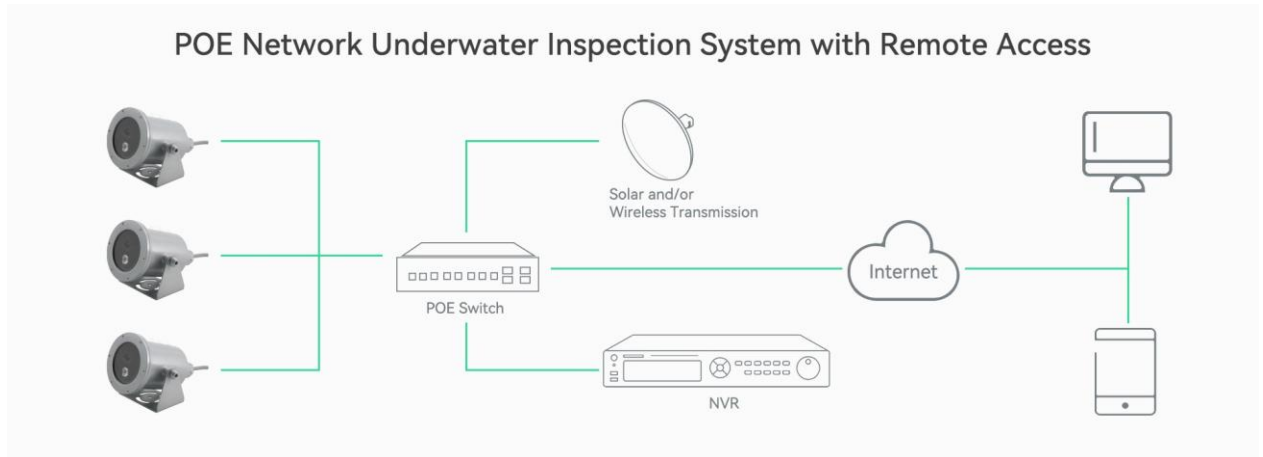
- 8MP (3840x2160) resolution @ 20fps, or 4MP (2560\*1440) @ 30fps
- Wide angle of view, H.FOV 102° and V.FOV 55°
- Designed to be used underwater permanently, max. depth of water 50 meters (165ft)
- 304 stainless steel material and anti-corrosion cable for fresh water and salt water
- White LEDs with remote on/off control
- H.265/H.264 video compression, dramatically reducing storage and bandwidth
- Intuitive WEB GUI, compatible to Chrome/ Safari/IE/Edge, no plug-in is required.
- Suppok video analysis, like intrusion detection and human body detection
- Suppok ROI (Region of Interest) encoding, get more details on important areas
- Compliant to ONVIF, providing API/SDK for 3rd party system integration
- Power supply: POE
- Remote access video from PC WEB client, free software and Mobile App
- Custom cable length, by default 10 meters (33ft)

### Optional Add-on

- NVR recorder with 10TB to 80TB storage capacity
- Solar power system
- 4G router

## System Diagram

Linovision provides a complete system for multi-sites remote monitoring, for example, NVR for local high capacity storage (up to 80TB), wireless transmission, solar power, VMS software for multi-cameras management, and mobile App with cloud access (free of charge).



## Dimension



## Applications



Aquaculture Farm



Dam



Water Treatment Facility



Aquarium

This industrial underwater camera has been widely deployed in applications like aquaculture farms, water treatment facilities, reservoirs, dams, marine aquariums, etc.

## Specification

<b>Camera</b>	
Image Sensor	1/2.5" Progressive Scan CMOS
Min. Illumination	Color: 0.01 lux @(F1.2, AGC ON), 0 lux with IR
Shutter Speed	1/3 s to 1/100,000 s
Slow Shutter	Support
Lens	2.8 mm, horizontal FOV: 102°, vertical FOV: 55°, diagonal FOV: 120°
Lens Mount	M12
Iris	F2.0
Day & Night	IR cut filter
DNR	3D DNR
Wide Dynamic Range	120dB
<b>Compression Standard</b>	
Video Compression	Main stream: H.265/H.264 Sub stream: H.265/H.264/MJPEG Third stream: H.265/H.264
H.264 Type	Main Profile/High Profile
H.264+	Support
H.265 Type	Main Profile
H.265+	Support
Video Bit Rate	32 Kbps to 16 Mbps
<b>Image</b>	
Max. Resolution	3840 × 2160
Main Stream	50Hz: 20 fps (3840 × 2160), 25 fps (2560 × 1920, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 20 fps (3840 × 2160), 30 fps (2560 × 1920, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub Stream	50Hz: 25fps (640 × 360, 352 × 288) 60Hz: 30fps (640 × 360, 352 × 240)
Third Stream	50Hz: 25fps (1280 × 720, 640 × 360, 352 × 288) 60Hz: 30fps (1280 × 720, 640 × 360, 352 × 240)
Image Enhancement	BLC/3D DNR
Image Settings	Support rotate mode. Brightness, contrast, saturation, and sharpness are adjustable via web browser and client software
ROI (Region of Interest)	Support 1 fixed region for mainstream and sub stream separately
Day/Night Switch	Auto/Scheduled

<b>Network</b>	
Network Storage	Support microSD/SDHC/SDXC card (128G) local storage, NAS (NFS,SMB/CIFS), ANR
Alarm Trigger	Motion Detection, Tampering Alarm, Network Disconnected, IP Address Conflict, Illegal Login, HDD full, HDD error
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6
Standard	ONVIF (PROFILE S, PROFILE G), PSIA, CGI, ISAPI
General Function	One-key Reset, Anti-Flicker, Heartbeat, Mirror, Password Protection, Privacy Mask, Watermark, IP Address Filter
<b>Interface</b>	
Communication Interface	1 RJ45 10M/100M self-adaptive Ethernet port
<b>Smart Feature-set</b>	
Behavior Analysis	Line crossing detection, intrusion detection, unattended baggage detection, object removal detection
Line Crossing Detection	Cross a pre-defined virtual line, up to 1 pre-defined virtual lines supported
Intrusion Detection	Enter and loiter in a pre-defined virtual region, up to 1 pre-defined virtual regions supported
Object Removal Detection	
Unattended Baggage Detection	Objects left over in the pre-defined region such as the baggage, purse, dangerous materials
<b>General</b>	
Operating Conditions	-30 °C to +60 °C (-22 °F to +140 °F), Humidity 95% or less (non-condensing)
Power Supply	PoE(802.3af, class 3), 7.5W
IR Range	Up to 30 m
Protection Level	IP67
Dimensions (L × W × H)	100×90×100mm (3.9"×3.5"×3.9")
Weight	1.95kg (4.3lb)
Material	304 stainless steel, anti-corrosion
Working Environment	-30 °C ~ +60 °C (-22 °F ~ 140 °F), Humidity: ≤95% RH(non-condensing)
waterproof capability	up to 50 meters (165 feet) of fresh or saltwater resistance for long-term underwater deployment
<i>*Disclaimer: Design and specifications are subject to changes without prior notice.</i>	