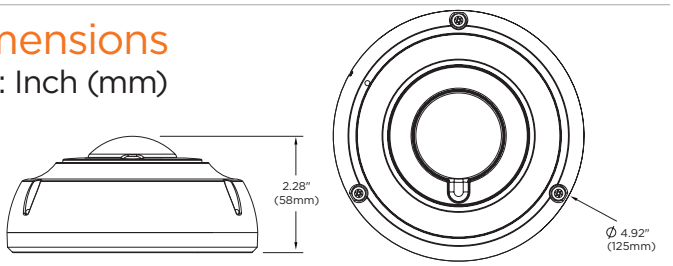
MEGApix Ai™
Next-generation video analytics

12MP fisheye IP camera with Ai
DWC-XFFA12Ai



Dimensions
Unit: Inch (mm)



Summary

This NDAA/TAA-compliant MEGApix Ai fisheye camera delivers 12MP complete 360° room coverage with built-in AI that detects and tracks people. It captures clear, detailed video even in very low light or high contrast environments, ensuring critical details are always visible.
The camera's durable, weather and vandal-resistant design makes it a reliable choice for any environment, while smart bandwidth management helps optimize network performance. With two-way audio and seamless integration with any open platform system, it provides powerful, efficient monitoring in one easy-to-deploy device.

Features

- 12MP Star-Light Plus image sensor
- Star-Light Plus color in near-total darkness technology.
- AI-based people detection and tracking.
- Create up to 40 separate detection zones.
- Easy setup with no manual calibration
- Seamless integration and control with DW Spectrum.
- Reduce false alarms with multiple detection zones and logical rules.
- Increase your recording storage with smart recording and no false alarms.
- Support 360° hemispheric fisheye view and 360°, 180° and 90° panoramic view
- Edge-to-edge image clarity with no pixel loss
- 1.5mm fisheye lens with 360° hemispheric view
- True Wide Dynamic Range (WDR) for clear images in challenging light
- Simultaneous streaming and multiple codec options for smart bandwidth management
- 70' Smart IR with intelligent camera sync for clear B/W images with no need for external light
- Smart DNR 3D digital noise reduction minimizes noise and ghosting in motion, particularly in low-light environments.
- Privacy zones cover sensitive areas in the camera's field of view.
- Two-way audio with a built-in microphone for direct communication between the monitoring station and the camera's location.
- Local SD card slot for local recording in case of network loss.
- Alarm sensor input and relay output for access control integration
- Web server built-in for easy camera management from any browser
- High-power PoE and DC12V for single cable simplified installation
- NDAA/TAA compliant for federal and government projects
- IP67- and IK10-rated camera housing built to last
- 5 year warranty

Accessories (Optional)


DWC-VFWMW
Wall mount bracket


DWC-PMB-WLW
Pole mount bracket


DWC-VFJUNCW
Junction box


DWC-V1CNMW
Corner mount


DWC-VFCMW
Ceiling mount bracket


DWC-GPLT-W
Converter plate


DWC-VFHMW
Hanging mount

Specifications

IMAGE	
Image sensor	1/2.3" 12.93MP Star-Light Plus sensor
Total pixels	4073(H) X 3176(V)
Active pixels	4000(H) X 3000(V)
Minimum scene illumination	0.52 lux (color), 0 lux (B/W)
S/N ratio	50dB
Test monitor video output	Local video output CVBS 1.0V p-p (75Ω), 4:3 aspect ratio
LENS	
Focal length	1.5mm, F2.2
Lens type	Fisheye Lend
Field of view (HFoV/ VFoV)	185°/ 185°
IR distance	70ft
I/O	
Audio in/out, compression	1 microphone built-in/ 1 output, G.711 ulaw
Alarm input/output	1 input/1 output
Event trigger	Motion alarm, network loss, temperature anomaly, illegal login, schedule, sensor detection, tamper detection
INTELLIGENT VIDEO ANALYTICS	
AI-based video analytics	AI-based people detection and tracking
Analytics filters	Zones and lines, tamper, metadata, intrusion, line crossing, counting lines, appear, disappear, stopped, enter, exit, direction, tailgating, dwell, logical rules
OPERATIONAL	
Shutter mode	Auto, manual, anti-flicker, slow shutter
Shutter speed	1/15 ~ 1/32000
Slow shutter	1/2, 1/3, 1/5, 1/6, 1/7.5, 1/10
Auto gain control	Auto
Day and night	Auto, day (color), night (B/W)
3D Digital Noise Reduction	Smart DNR 3D-DNR
WDR	True WDR, 120dB
White balance	Yes
Privacy zones	16 programmable privacy masks
Mirror and flip	Yes
Alarm notifications	Notifications via email, FTP, alarm output and SD card recording
Memory slot	Micro SD/SDHC/SDXC class 10 card (not included)
NETWORK	
LAN	RJ45 (10/100Base-T)
Video compression type	H.265, H.264, MJPEG
Resolution	H.265, H.264: 4000x3000, 3008x3000, 2800x2800, 1600x1600, 640x640, 320x320 MJPEG: 1440x1440, 1280x1280, 640x640, 320x320
Frame rate	Up to 30fps. NOTE: For 12MP resolution, max frame rate is 20fps.
Video bitrate	100Kbps ~ 25Mbps, multi-rate for preview and recording
Bitrate control	Multi-streaming CBR/VBR at H.264, H.265 (controllable frame rate and bandwidth)
Streaming capability	Triple Streaming (3rd stream MJPEG only)
IP	IPv4
Protocol	TCP/IP, UDP, AutoIP, RTP (UDP/TCP), RTSP, NTP, HTTP, HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMPv1/v2/v3 (MIB-2), ONVIF
Security	HTTPS (TLS), IP filtering, 802.1x, digest authentication
ONVIF conformance	Yes
Web viewer	OS: Windows OS, Mac OS, Linux OS Browser: Microsoft Edge, Google Chrome, Mozilla Firefox, Safari
Video management software	DW Spectrum
ENVIRONMENTAL	
Operating temperature	-4°F ~ 122°F (-20°C ~ 50°C)
Operating humidity	10~90% RH, (non-condensing)
IK, IP rating	IK10 impact-resistant, IP67-rated
Other certifications	CE, FCC, UL, NDAA, TAA
ELECTRICAL	
Power requirement	DC12V, PoE, adapter not included
Power consumption	12V DC: 10.2W, 850mA, PoE: 11.5W, 239mA
MECHANICAL	
Material	Aluminum vandal housing, polycarbonate lens cover
Dimensions	4.92" x 2.28" (125 x 58mm)
Weight	1.21 lbs (0.55 kg)
Warranty	5 year warranty

Built for Users.™

: 866.446.3595
: sales@digital-watchdog.com
: www.digital-watchdog.com

Rev: 04/26

Copyright © DW. All rights reserved. Specifications and pricing subject to change without notice.