

# DS-2DF9C245IHS-DLW(T2) 2 MP 45x Outdoor IP IR PTZ Camera



- Dual-Sensor, 1/1.8" Progressive Scan CMOS
- Full-Color Image Output
- Up to 1920 × 1080 Resolution
- Minimum Illumination:

Color: 0.0005 Lux @ (*f*/1.6, AGC on) B/W: 0.0001 Lux @ (*f*/1.6, AGC on) 0 Lux with IR

- 45x Optical Zoom, 16x Digital Zoom
- 140 dB WDR, 3D DNR, HLC, BLC, EIS, Optical Defog
- H.265+/H.265 Video Compression
- Rapid Focus
- Deep Learning-Based Target Classification for Auto-Tracking 2.0 and Perimeter Protection
- 550 yd (500 m) IR Range, Smart IR
- Rain-Sensing Auto Wiper

The Hikvision DS-2DF9C245IHS-DLW (T2) 2 MP 45x Outdoor IP IR PTZ Camera belongs to the DarkFighterX camera family. With the patented dual-sensor design, it is able to process color and brightness independently and outputs one full-color image.

This camera can be widely used for wide ranges of highdefinition such as rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations, large venues, etc.

Available Models:

DS-2DF9C245IHS-DLW(T2)



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## **Specifications**

	DS-2DF9C245IHS-DLW(T2)
Camera Module	
Image Sensor	1/1.8" progressive scan CMOS, dual-sensor structure
Minimum Illumination	color: 0.0005 lux @ (f/1.6, AGC on), B/W: 0.0001 lux @ (f/1.6, AGC on), 0 lux with IR
Shutter Speed	1/1 to 1/30,000s
Slow Shutter	Yes
Focus	Semi-auto, manual, auto
Day/Night	Electronic
Day/Night Switch	Day, night, auto, scheduled-switch
BLC	Yes
WDR	140 dB WDR
HLC	Yes
3D DNR	Yes
Defog	Yes
EIS	Yes
Regional Exposure	Yes
Regional Focus	Yes
Image Settings	Saturation, brightness, contrast, sharpness
Image Parameters Switch	Yes
White Balance	Auto, ATW, sodium lamp, fluorescent lamp, indoor, outdoor, MWB
Digital Zoom	
Optical Zoom	45x
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Privacy Mask	Up to 24 masks, polygon region, mosaic mask, mask color configurable
Picture Overlay	Yes
SNR Conorol Eurotion	255 dB
General Function	Mirror, password protection, watermark, IP address filter
Lens	
Focal Length	5.9 mm to 265 mm
Zoom Speed	Approximately 4.8 s
501/	Horizontal field of view: 58.9° to 1.7°(wide_tele)
FOV	Vertical field of view: 35.3° to 0.9°(wide-tele)
Mision Westing Distance	Diagonal field of view: 65.9° to 1.9° (wide-tele)
Minimum Working Distance	100 mm to 1500 mm (wide-tele)
Aperture	f/1.6
Aperture Range	f/1.6 to f/4.4
PTZ	360°
Movement Range (Pan)	
Movement Range (Tilt)	-25° to 90° (auto flip)
Pan Speed	Pan speed: configurable from 0.1° to 210°/s; preset speed: 280°/s
Tilt Speed	Tilt speed: configurable from 0.1° to 150°/s; preset speed 250°/s
Proportional Zoom	Yes
Presets	300
Patrol Scan	
Pattern Scan	8 patrols, up to 32 presets for each patrol
	4 pattern scans, record time over 10 minutes for each scan
Power-Off Memory	4 pattern scans, record time over 10 minutes for each scan Yes
Park Action	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
Park Action 3D Positioning	4 pattern scans, record time over 10 minutes for each scan Yes
Park Action 3D Positioning PTZ Status Display	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes
Park Action 3D Positioning	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240)
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720)
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240)
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPE6
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPEG 32 Kbps to 16384 Kbps
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPEG 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPE6 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.264+	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPE6 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.265+	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps [1920 × 1080, 1280 × 960, 1280 × 720] 30 fps (704 × 480, 640 × 480, 352 × 240] 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240] H.265, H.264, MJPEG 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.264+ H.265+ SVC	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPE6 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.265+ SVC ROI	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps [1920 × 1080, 1280 × 960, 1280 × 720] 30 fps (704 × 480, 640 × 480, 352 × 240] 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240] H.265, H.264, MJPEG 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.265+ SVC ROI Audio	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPEG 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes Yes
Park Action 3D Positioning PTZ Status Display Preset Freezing Scheduled Task Vandal-Resistant Alarm Video Maximum Resolution Stream Type Main Stream Sub-Stream Third Stream Video Compression Video Bit Rate H.264 Type H.265 Type H.265+ SVC ROI	4 pattern scans, record time over 10 minutes for each scan Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan Yes Yes Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output Yes 1920 × 1080 Main stream, sub-stream, third stream 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) 30 fps (704 × 480, 640 × 480, 352 × 240) 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240) H.265, H.264, MJPE6 32 Kbps to 16384 Kbps Baseline profile, main profile, high profile Main profile Yes Yes



### Specifications (continued)

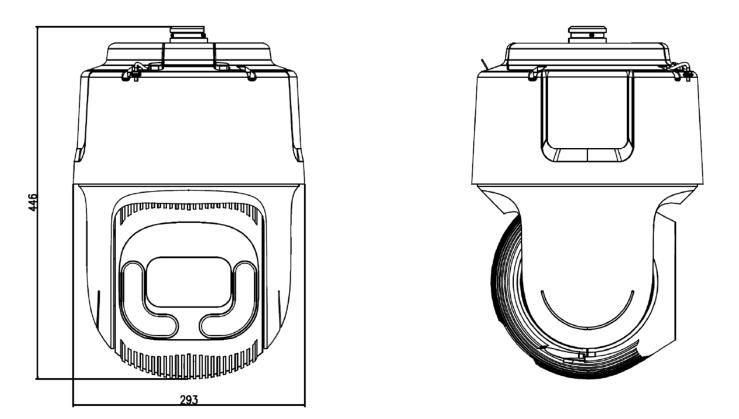
Face capture	Detects up to 30 faces at the same time. Detects, tracks, captures, grades, selects face in motion, and outputs best face picture				
Pood Troffic	Iace picture				
Nuau Hailic	Supports vehicle detection (license plate number, vehicle model, and vehicle color)				
Creart Event	Unattended baggage detection, object removal detection, intrusion detection, line crossing detection, region entrance detection, region exiting detection, audio exception detection				
Smart Tracking	Manual tracking, event tracking, auto-tracking				
Smart Record					
Alarm Linkage	Preset, patrol scan, pattern scan, memory card video recording, alarm output, send e-mail, notify surveillance center, upload to FTP, smart tracking, NAS video recording				
	H.265+, H.264+, ROI, SVC				
Network					
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour				
	ISAPI, Hikvision SDK, ONVIF (Profile S, Profile G, Profile T)				
	20				
	32				
Security Measures	Authenticated username and password, MAC address binding, HTTPS encryption, 802.1x authenticated access, IP ad- dress filter				
	IE 8 to 11, Chrome 57+, Firefox 52+, Safari 12+				
Interface					
	Built-in microSD slot, supports microSD/microSDHC/microSDXC cards, up to 256 GB				
	7 alarm inputs				
Alarm Output	2 alarm output				
	1 audio input, 2.0 to 2.4Vp-p, 1k Ω ±10%				
	1 audio output, line level, impedance: 600 Ω				
	1.0V[p-p]/75 Ω, PAL, NTSC, BNC connector				
	Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive				
Supplement Light					
IR Distance	500 meters				
Smart IR	Yes				
General					
Power	36 VDC				
	Maximum 90 W, including maximum 12 W for IR				
Operating Conditions	Temperature: -40° to 158° F (-40° to 70° C), humidity: ≤95% non-condensing				
Wiper	Yes, rain-sensing auto control				
Material	ADC12				
Color	Gray				
Dimensions	Ø11.5" × 16.6" (Ø293 mm × 422 mm)				
Weight	Approximately 28.7 lb (13 kg)				
Web Client Language	32 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)				
Approval					
	Lightning protection, surge protection, and voltage transient protection, ±6 kV line to gnd, ±3 kV line to line, IEC61000-				
	4-5				

#### DORI

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance (Tele)	3351.7 m (10996.4 ft)	1330 m (4363.5 ft)	670.3 m (2199.1 ft)	335.2 m (1099.7 ft)





## **Accessories**

INCLUDED		NOT INCLUDED				
		F		Ĩ		
36 VDC Power Adapter	<b>G1.5 Adapter</b> Converts Hikvision quick release to G1.5"	WMP-PV-G Wall Mount	<b>PM-G</b> Vertical Pole Mount (shown w/WMP-PV- G wall mount)	CPM20-PV-G Pendant Mount	<b>CPM-PV-G</b> Pendant Mount	

