

# DH-SD65F230IA-HC

2MP 30x Starlight PTZ HDCVI Camera



- · 1/1.9" 2Megapixel CMOS
- · Powerful 30x optical zoom
- · Starlight technology
- Max. 25/30fps@1080P, 25/30/50/60fps@720P
- · IP67,IK10











#### **System Overview**

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, this series provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. with its Starlight Technology, the camera is the perfect solution for lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality for variable lighting conditions during the day and True WDR for applications with direct sunlight or glare.

#### **Functions**

#### **Starlight Technology**

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.002 lux).

## **Wide Dynamic Range**

Embeded 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.

#### **Environmental**

With a temperature range of -40 °C to +70 °C (-40 °F to +158 °F), the camera is designed for extreme temperature environments. The camera complies an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

### Protection

Supporting  $\pm 25\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protectection against the camera and its structure from the effects of lightning.



Technical Specification  Camera  Image Sensor  If J.19° CMOS  Effective Pixels  1920(H) x 1080(V), 2 Megapixels  White Balance  Auto,ATW,Indoor,Outdoor,Manual  Scanning System  Progressive  Electronic Shutter Speed  I/13° 1/30,0000s  Minimum Illumination  Color: 0.002Lux@F1.5; B/Vr0.0002Lux@F1.5  S/N Ratio  More than 56dB  IR Distance  N/A  IR Bottonce  N/A  IR EDS  N/A  Lens  Frocal Length  Max. Aperture  F1.5° F4.3  Angle of View  H: 61.2° - 2.1°  Optical Zoom  30x  Focus Control  Auto/Manual  Close Focus Distance  10mm ~ 1500mm  DORN Distance  Note: The DORN distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is a declusted based on sensor specification and lab text result according to IN 02676-4 which defines the criteria for Detect, Observe. Recognize  Detect  Observe  Recognize  Mental Support  Auto/Manual  Close Focus Distance  1 Construction  Electrical  Power Supply  Accaty/3a(125%)  Power Consumption  Environmental  Support Support Support Support Accaty Support  Vandal Resistance  Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab text result according to IN 02676-4 which defines the criteria for Detect, Observe, Recognize  Detect  Observe  Recognize  Mentify  1920m(6299ft)  758m(2520ft)  384m(1260ft)  192m(630ft)  Power Supply  Accaty/3a(1258)  Power Consumption  Environmental  Support  Auto/Manual  Litter  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Length  File  File  Support  Length  Auto (Manual  Noise Reduction  Ultra DNR (2D/3D)							
Image Sensor  1/1.9" CMOS  Backlight Compensation  BLC / HLC / WDR (120dB)  Effective Pixels  1920(H) x 1080(V), 2 Megapixels  White Balance  Auto,ATW,Indoor,Outdoor,Manual  Cletronic Shutter Speed  1/1s**1/300,000s  Moise Reduction  Ultra DNR (2D/3D)  Digital Zoom  16x  Flip  180*  Flip  180*  Privacy Masking  Up to 24 areas  Certifications  Council Uttra DNR (2D/3D)  Interface  Video Interface  Video Interface  1 Canadia Interface  Video Interface  1 Channel In  Audio Interface  1 Close Focus Distance  DORI Distance  Nator Manual  Close Focus Distance  1 Close Focus	Technical Spec			Day/Night	Auto(ICR) / Color / B/W		
Effective Pixels 1920(H) x 1080(V), 2 Megapixels White Balance Auto,ATW,Indoor,Outdoor,Manual Electronic Shutter Speed 1/1s-1/300,000s Noise Reduction Ultra DNR (2D/3D)  Minimum Illumination Color: 0.002Lux@F1.5; B/W:0.0002Lux@F1.5  JN Ratio More than 56dB  IR Distance N/A  IR Distance N/A  IR LEDs N/A  Lens  Focal Length 6mm*180mm  Max. Aperture F1.5* F4.3  Angle of View H: 61.2* ~ 2.1*  Optical Zoom 30x  Auto/Manual  Electricalions  Certifications  Tocus Control Auto/Manual  Electrical  Close Focus Distance 10mm ** 1500mm  DORI Observe, Recognize and Identify respectively.  Detect Observe, Recognize and Identify tespectively.  Detect Observe, Recognize and Identify 192m(630ft)  PTZ	Camera					OSD Menu	Support
Scanning System   Progressive   Gain Control   Auto / Manual	Image Sensor		1/1.9" CMOS			Backlight Compensation	BLC / HLC / WDR (120dB)
Electronic Shutter Speed 1/1s=1/300,000s Noise Reduction Ultra DNR (2D/3D)  Minimum Illumination Color: 0.002Lux@F1.5; 8/W:0.0002Lux@F1.5  S/N Ratio More than 56dB  IR Distance N/A  IR Distance N/A  IR EDS N/A  Lens  Focal Length 6mm=180mm  Max. Aperture F1.5~ F4.3  Angle of View H: 61.2*~ 2.1*  Optical Zoom 30x  Focus Control Auto/Manual  Close Focus Distance 10mm ~ 1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sersor specification and lab text result according to EN 62.676-4 which defines the criteria for Petect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  Poigtal Zoom 16x  If is X  Flip 180°  Certifications C: ENS5032/ENS5024/ENS0130-4  FCC: Part1s subpartB, ANSI (635-4-2014  UI: UI: 0.60950-1+CAN/CSA C22.2, No. 60950-1  Interface  Video Interface 1  Audio Interface 1  Power Supply AC24V/3A(±25%)  Power Consumption 13W, 20W (Heater on)  Environmental  Environmental  Detect Observe Recognize and Identify respectively.  Detect Observe Recognize and Identify Ingress Protection IP67  Vandal Resistance IK10	Effective Pixels		1920(H) x 1080(V), 2 Megapixels			White Balance	Auto,ATW,Indoor,Outdoor,Manual
Minimum Illumination  Color: 0.002Lux@F1.5; B/W:0.0002Lux@F1.5  S/N Ratio  More than 56dB  Flip  180°  Privacy Masking  Up to 24 areas  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Certifications  Interface  Ui: UL60950-1+CAN/CSA C22.2,No.60950-1  Interface  Video Interface  1 Audio Interface  1 Audio Interface  1 Audio Interface  Privacy Masking  Up to 24 areas  Certifications  Certifications  Certifications  Certifications  Interface  Video Interface  1 Audio Interface  1 Audio Interface  1 Channel in  RS485  1 Alarm  2/1  Electrical  Power Supply  AC24V/3A(225%)  Power Consumption  13W, 20W (Heater on)  Environmental  Environmental  DOPAR Distance  Operating Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection  Ingress Protection  Privacy Masking  Up to 24 areas  Certifications  Interface  1 Audio Interface  1 Audio Interface  1 Channel in  RS485  1 Alarm  2/1  Electrical  Power Supply  AC24V/3A(225%)  Power Consumption  13W, 20W (Heater on)  Environmental  Operating Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection  Interface  Video Interface  1 Channel in  Audio Interface  1 Channel in  Audio Interface  1 Channel in  Audio Interface  1 Channel in  Alarm  2/1  Electrical  Power Supply  AC24V/3A(225%)  Power Consumption  13W, 20W (Heater on)  Environmental  Operating Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Interface  Power Supply  AC24V/3A(225%)  AC24V/3A(225%)  AC24V/3A(225%)  AC24V/3A(225%)  AC24V/3A(255%)  AC24V/3	Scanning System		Progressive			Gain Control	Auto / Manual
S/N Ratio   More than 56dB   Flip   180"	Electronic Shutter Speed		1/1s~1/300,000s			Noise Reduction	Ultra DNR (2D/3D)
IR Distance  N/A  IR On/Off Control  N/A  IR LEDs  N/A  Lens  Focal Length  Max. Aperture  F1.5~ F4.3  Angle of View  Optical Zoom  30x  Focus Control  Auto/Manual  Close Focus Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab lest result according to Ne (26.764 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect  Observe  Recognize  Marm (1260ft)  Privacy Masking  Up to 24 areas  Certifications  Certific	Minimum Illumination		Color: 0.002Lux@F1.5; B/W:0.0002Lux@F1.5			Digital Zoom	16x
IR Distance  IR On/Off Control  IR LEDs  N/A  Certifications  Interface  1  Audio Interface  1 channel in  RS485  1  Alarm  2/1  Electrical  Power Supply  Ac24V/3A(±25%)  Power Consumption  13W, 20W (Heater on)  Environmental  Environmental  Consumption  Environmental  Consumption  Consum	S/N Ratio		More than 56dB			Flip	180°
Certifications  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1  Interface  Focal Length 6mm~180mm  Max. Aperture F1.5~ F4.3  Angle of View H: 61.2~~2.1*  Optical Zoom 30x  Focus Control Auto/Manual  Close Focus Distance 10mm~1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 6257-64 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize identify  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  Certifications  Interface  1  Audio Interface  1  Audio Interface 1 channel in  RS485 1  Alarm 2/1  Electrical  Power Supply AC24V/3A(±25%)  Power Consumption 13W, 20W (Heater on)  Environmental  Environmental  Operating Conditions -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  Vandal Resistance IK10						Privacy Masking	Up to 24 areas
Certifications  Interface  1  Audio Interface  1  Audio Interface  1 channel in  R5485  1  Alarm  2/1  Electrical  Power Supply  AC24V/3A(±25%)  Power Consumption  13W, 20W (Heater on)  Environmental  Operating Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection  IP67  1920m(6299ft)  768m(2520ft)  384m(1260ft)  192m(630ft)  Vandal Resistance  III.  Certifications  Certifications  Certifications  Interface  1  Audio Inter						Certifications	
Focal Length 6mm~180mm  Max. Aperture F1.5~ F4.3  Angle of View H: 61.2° ~ 2.1°  Optical Zoom 30x  Focus Control Auto/Manual  Close Focus Distance 10mm ~ 1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  Vandal Resistance I 1  Audio Interface 1  Audio Interface 1  Audio Interface 1  Power Supply 2/1  Electrical  Power Supply AC24V/3A(±25%)  Power Consumption 13W, 20W (Heater on)  Environmental  Operating Conditions -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection IP67  Vandal Resistance IK10						Certifications	FCC: Part15 subpartB,ANSI C63.4- 2014
Max. Aperture  F1.5~ F4.3  Angle of View  H: 61.2° ~ 2.1°  Optical Zoom  30x  Focus Control  Auto/Manual  Close Focus Distance  10mm ~ 1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect  Observe  Recognize  Identify  Video Interface  1 Audio Interface  1 channel in  RS485  1  Alarm  2/1  Electrical  Power Supply  AC24V/3A(±25%)  Power Consumption  13W, 20W (Heater on)  Environmental  Service (-40°F ~ +158°F) / Less than 95%  Ingress Protection  Ip67  Vandal Resistance  IK10	Lens				Interface		
Angle of View  H: 61.2° ~ 2.1°  Optical Zoom  30x  Focus Control  Auto/Manual  Close Focus Distance  10mm ~ 1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect  Observe  Recognize  Audio Interface  1 channel in  RS485  1  Alarm  2/1  Electrical  Power Supply  AC24V/3A(±25%)  Power Consumption  13W, 20W (Heater on)  Environmental  Operating Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection  IP67  Vandal Resistance  IK10	Focal Length		6mm~180mm			Video Interface	1
Optical Zoom 30x  Focus Control Auto/Manual  Close Focus Distance 10mm ~ 1500mm  DORI Distance  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  PAIR Alarm 2/1  Electrical  Power Supply AC24V/3A(±25%)  Power Consumption 13W, 20W (Heater on)  Environmental  Operating Conditions -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection IP67  Vandal Resistance IK10			F1.5~ F4.3			Audio Interface	1 channel in
Focus Control  Auto/Manual  Close Focus Distance  10mm ~ 1500mm  Power Supply  AC24V/3A(±25%)  Power Consumption  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect  Observe  Recognize  Identify  Ingress Protection  IP67  Vandal Resistance  IK10	Angle of View		H: 61.2° ~ 2.1°			RS485	1
Close Focus Distance  10mm ~ 1500mm  Power Supply  AC24V/3A(±25%)  Power Consumption  13W, 20W (Heater on)  13W, 20W (Heater on)  Environmental  Environmental  Power Consumption  13W, 20W (Heater on)  13W, 20W (Heater on)  13W, 20W (Heater on)  Environmental  Detect Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify  Ingress Protection  Power Consumption  13W, 20W (Heater on)  Environmental  Departing Conditions  -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95%  Ingress Protection  IP67  1920m(6299ft)  768m(2520ft)  384m(1260ft)  192m(630ft)  Vandal Resistance  IK10	Optical Zoom		30x			Alarm	2/1
Power Supply AC24V/3A(±25%)  Power Supply AC24V/3A(±25%)  Power Consumption 13W, 20W (Heater on)  *Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft) Vandal Resistance IK10	Focus Control		Auto/Manual			Electrical	
*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft) Vandal Resistance IK10	Close Focus Distance		10mm ~ 1500mm			Power Supply	AC24V/3A(±25%)
*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.  Detect Observe Recognize Identify  Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft)  Vandal Resistance IK10							
Detect Observe Recognize Identify Ingress Protection IP67  1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft) Vandal Resistance IK10  PTZ	pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the			·			
1920m(6299ft) 768m(2520ft) 384m(1260ft) 192m(630ft) Vandal Resistance IK10  PTZ					Operating Conditions	-40°C ~ 70°C (-40°F ~ +158°F) / Less than 95% RH	
PTZ Vandal Resistance IK10						Ingress Protection	IP67
PTZ Construction	1920m(6299ft)	768m(2520f	7ft) 384m(1260ft) 192m(630ft)		Vandal Resistance	IK10	
						Construction	
Pan/Tilt Range Pan: 0° ~ 360° endless; Tilt: -20° ~ 90°, auto flip 180° Casing Metal	· · ·		Pan: 0° ~ 360° endless; Tilt: -20° ~ 90°, auto flip 180°			Casing	Metal
Manual Control Speed Pan: 0.1° ~300° /s; Tilt: 0.1° ~150° /s Dimensions Ф242(mm) x 341 (mm)	·		Pan: 0.1° ~300° /s; Tilt: 0.1° ~150° /s			Dimensions	Ф242(mm) x 341 (mm)
Preset Speed Pan: 600°/s; Tilt: 500°/s Net Weight 4.5kg(9.92lb)	Preset Speed		Pan: 600° /s; Tilt: 500° /s			Net Weight	4.5kg(9.92lb)
Presets         300         Gross Weight         8.25kg(18.19lb)	Presets		300			Gross Weight	8.25kg(18.19lb)
PTZ Mode 5 Pattern, 8 Tour, Auto Pan ,Auto Scan	PTZ Mode		5 Pattern, 8 Tour, Auto Pan ,Auto Scan				
Speed Setup Human-oriented focal Length/ speed adaptation	Speed Setup		Human-oriented focal Length/ speed adaptation				
Power up Action  Auto restore to previous PTZ and lens status after power failure	Power up Action		·				
Idle Motion  Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period	Idle Motion						

DH-SD, Pelco-P/D (Auto recognition)

1080P(1920×1080)/720P(1280×720)

25/30fps@1080P, 25/30/50/60fps@720P

1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (switchable)

Protocol Video

Resolution

Frame Rate

Video Output

Ordering Information								
Туре	Part Number	Description						
	DH-SD65F230IA-HC	2MP 30x Starlight PTZ HDCVI Camera, WDR, PAL						
2MP PTZ	DH-SD65F230IAN-HC	2MP 30x Starlight PTZ HDCVI Camera, WDR, NTSC						
Camera	SD65F230IA-HC	2MP 30x Starlight PTZ HDCVI Camera, WDR, PAL						
	SD65F230IAN-HC	2MP 30x Starlight PTZ HDCVI Camera, WDR, NTSC						
	PFB303W	Wall Mount						
	PFA111	Mount Adapter						
	AC24V/3A	Power Supply						
	PFA140	Power box						
Accessories	PFB300C	Ceiling Mount						
	PFA120	Junction Box						
	PFA150	Pole Mount						
	PFA151	Corner Mount						
	PFB303S	Parapet mount						

Ceiling Mount	Junction Mount
PFA111 + PFB300C	PFA111 + PFB303W + PFA120
Power Box Mount	Pole Mount
PFA111 + PFB303W + PFA140	PFA111 + PFB303W + PFA150
Corner Mount	Parapet Mount
PFA111 + PFB303W + PFA151	PFA111+ PFB303S

# **Accessories**

# Included:



PFB303W Wall Mount



PFA111 Mount Adapter



AC24V/3A Power Supply

## Optional:



PFA140 Power box



PFA150 Pole Mount



PFB300C Ceiling Mount



PFA151 Corner Mount



PFA120 Junction Box



PFB303S Parapet Mount

# Dimensions (mm)



