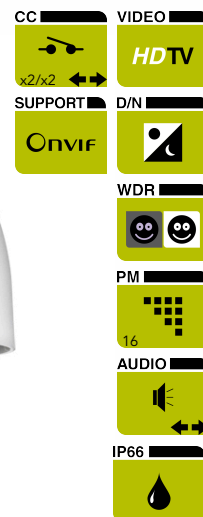


## Features

- Full HD 1080p resolution
- Multistream H.264/H.264 or H.264/MJPEG
- 20x optical zoom / 8x digital zoom
- Optical output / analogue output options
- Day/Night with IR-cut filter / WDR / BLC
- 400° /s preset targeting
- 360° Continuous rotation
- 256 Presets / 8 programmable cruises
- 2 Alarm inputs / 2 outputs
- Two-way audio
- 16 Privacy masks



## HSD820H2-E

### High-definition outdoor PTZ with multistream H.264; 20x zoom

#### Description

The Siquira® HSD820H2-E is an outdoor high-speed PTZ dome camera with exceptional imaging controls providing high-definition (1080p) pictures for highly detailed surveillance footage.

##### High-speed Dome

The HSD820H2-E high-speed PTZ dome camera has a 20x autofocus zoom lens with 8x digital zoom. Precision 400° per second pan and tilt drive technology offer almost instant preset positioning. Support for many presets, cruises, and sequences provides for highly flexible manual or automatic operation.

##### Multistream high definition

HSD820H2-E series cameras have quad-stream capability for simultaneous streaming of H.264/H.264 or H.264/MJPEG. Multiple combinations of resolution and frame rate can be configured to satisfy different live viewing and recording scenarios. Full frame rate, full-HD 1080p streaming with a D1 second stream or dual 720p streaming is possible.

##### Open standards

Multiple options are available to easily integrate the HSD820H2-E to a video management system. In support of open standards, the HSD820H2-E is compliant with both the ONVIF specification and Siquira's Open Streaming Architecture (OSA) HTTP API.

##### Day/Night, BLC, and WDR

The HSD820H2-E provides automatic day/night functionality for use in low-light situations. Backlight compensation (BLC) enhances image visibility in difficult lighting situations. This ensures quality pictures at all times. Wide dynamic range (WDR) solves the problem of overlit images by applying dynamic gain.

##### Audio, I/O contacts, and analogue output

By combining streaming video with duplex audio and I/O contacts over IP, the HSD820H2-E provides all the interfaces necessary for any IP CCTV application. The HSD820H2-E is a hybrid solution and can provide local video for a public view monitor or local DVR.

##### Privacy masks

Privacy masks cover sections of the image. This feature is often requested for such situations as city centre surveillance and point of sale keypad.

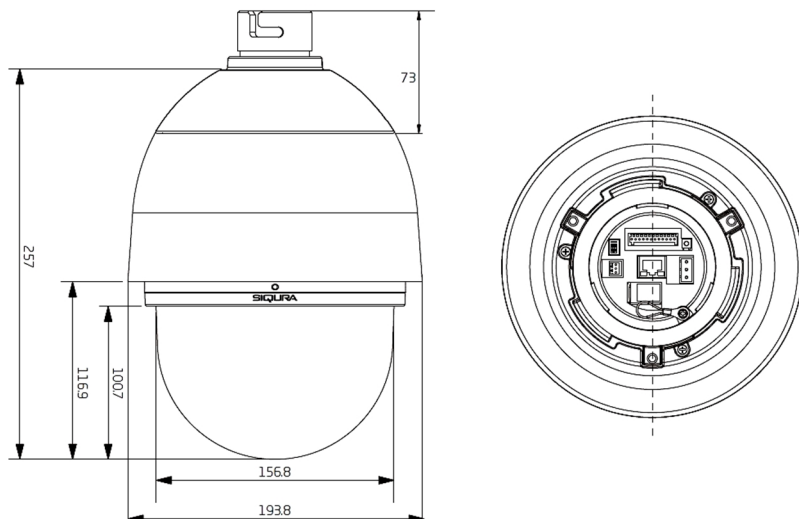
##### Fiber option

In addition to the RJ-45 interface, an SFP interface comes standard with the HSD820H2-E for direct connection of fiber to the camera. The XSNet™ range of SFP modules, with options for both single mode and multimode is available. The SFP interface is built into the device itself so a wide range of mounting options is available.



# Technical Specifications

## HSD820H2-E



### Camera

Image sensor	1/2.8" Progressive scan CMOS
Electronic shutter	1/30~1/10000s
Minimum scene illumination	0.3 lux colour, 0.04 lux (b/w), 1/30 s shutter, 30IRE, F1.6
Focal length	4.7 to 94 mm
Focus mode	Auto/manual

### Pan / Tilt

Pan travel	360° Continuous
Tilt travel	-10°~190°
Preset speed	5°~400°/s
Manual speed	0.5°~90°/s
Presets	256 presets
Preset accuracy	0.225°
Cruise	8
Sequence	8
Autopan	4
Proportional pan and tilt	On/Off
Resume after power loss	Yes
Home function	Preset, sequence, autopan, cruise
Autoflip	Mechanical/off

### Functions

Privacy masks	16
Image rotation	Normal, flip, mirror, 180°
On-screen display	Date, time, and title (20 characters)
Local recording	Continuous, scheduled, alarm
Video motion detection	On/Off

# Technical Specifications

## HSD820H2-E

### Image Control

Wide dynamic range	On/Off
WDR value	84 dB
Backlight compensation	On/Off
White balance	Auto/indoor/outdoor/ATW/manual
Iris control	Auto/manual
Sharpness	15 Levels
2D Noise reduction	On/Off
Automatic gain control	Auto/manual
Day/Night (IR-cut filter)	Auto/On/Off
Digital zoom	8x
Optical zoom	20x

### Video

Number of video streams	4x H.264 or 3x H.264 + 1x MJPEG			
Number of output streams	Up to 20 (RTSP)			
Compression algorithm(s)	H.264 MP (ISO/IEC 14496-10), MJPEG			
Encoder bit rate control	Constant bit rate (CBR), Variable bit rate (VBR)			
Output bit rate (per H.264 stream)	Up to 8192 kbit/s			
Frame rate	1 to 25 fps, 1 to 30 fps			
Total output data rate	Up to 32 Mbit/s			
Maximum streaming capabilities	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
	H.264 1080p30	H.264 D1@30	-	-
	H.264 1080p30	H.264 CIF@30	H.264 CIF@30	H.264 CIF@30
	H.264 1080p15	H.264 1080p15	-	-
	H.264 1080p15	MJPEG 1080p15	-	-
	H.264 1080p15	H.264 720p30	H.264 D1@30	-
	H.264 1080p15	H.264 720p15	H.264 720p15	H.264 D1@30
	H.264 1080p15	H.264 D1@30	H.264 D1@30	H.264 D1@30
	H.264 720p30	H.264 720p30	H.264 D1@30	-
	MJPEG 1080p30	-	-	-
Analogue output	BNC (1.0 Vpp)			
Video standards	PAL/NTSC			

### Audio

Two-way audio	G.711, 8 kHz, A-law, $\mu$ -law, 64 kbit/s; G.726, 8 kHz, 40 kbit/s
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### Contact closures

Inputs	2x 0 - 5 V Input (internal 10 k $\Omega$ pull-up)
Outputs	2x Relay, no/nc (30 Vdc @ 4 A or 125 Vac @ 1 A)
Reactions	Preset/Sequence/Autopan/Cruise

# Technical Specifications

## HSD820H2-E

### Network

Interface(s)	10/100 Mb Ethernet (RJ-45) 100 Mb Ethernet (SFP)
Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, IEEE 802.1x, QoS, ONVIF Profile S
Connector type	RJ-45 or SFP

### Storage

Storage options	Micro SD card, 64 GB
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### Powering

Power consumption	20 W; 65 W with heater
Power	19.2 - 28.8 Vac (24 Vac nominal +/- 20%); 802.3at Power-over-Ethernet (PoE+)

### Environmental

Operating temperature - 24 Vac	Continuous -40 °C to +60 °C (-40 °F to +140 °F)
Operating temperature - PoE+	0 °C to +40 °C (+32 °F to +104 °F)
Ingress protection	IP66

### Mechanical

Dimensions	Ø192 × 292 mm (Ø7.6 × 11.5 in)
Weight	2.3 kg (5.1 lbs)
Housing	Aluminium
Colour	RAL 9003 (signal white)
Sunshield	ABS / Polycarbonate blend
Bubble	Optically clear polycarbonate
Impact rating	IK10

### Ordering Information

Models	Description
HSD820H2-E	High-speed PTZ dome camera, HD 1080P, outdoor, day/night, wide dynamic range, 50/60 Hz
PA03 /EU	Power supply, 230 Vac to 24 Vac, tinned leads, 3.0 A, outdoor (IP66)
PA03 /US	Power supply, 110 Vac to 24 Vac, tinned leads, 3.0 A, outdoor (IP66)
WM01A/HD	Mini wall mount for HD/HSD series
WM05	Corner plate, compatible with WM01A and WM07A
WM06	Wall box mounting, compatible with WM01A and WM07A
PM01	Pole thin direct mounting, compatible with WM01A and WM07A
PM04	Pole wide box mounting, compatible with WM01A and WM07A
PTM01	1-1/2" pipe thread adapter
ECO-plug	Ethernet over coax converter in SFP format
XSNet SFP MM/.....	Multimode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/.....	Single-mode SFP, available in 1- or 2-fiber, different distance and speed ratings
XSNet SFP SM/CWDM.....	Single-mode CWDM SFP, available in 8 wavelengths
For a detailed overview of available SFP types consult appropriate product data	



The quality management system used in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.

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