COHU|HD

Series 3720^{HD}
H.264 High Definition
IP66 Dome Positioning System

Helios

- Superior HD Image Resolution
- Powerful 30x Optical Zoom
- Electronic Image Stabilization
- Defog/Dehaze Analytics
- H.264/MJPEG Video Codecs
- Web Server Configuration, Operation and Viewing
- Wide Range, Variable Speed, Smooth Positioning Movements
- Presets, Tours, Patterns, Sectors and Privacy Masks
- Automated Event Actions

- Two Input, Two Output Digital I/O Support
- IP66 Ingress Protection
- -35°C to 75°C Operation
- NTCIP 1205 over IP Communication Support
- 24Vac or PoE+ Power Input
- Single Connector Simplicity
- Pendent, Wall and Pole and Mounting Options
- ONVIF Profile S Compliant

ONVIF
Profile S

CohuHD's 3720^{HD} dome positioning system combines crystal clear HD image quality, bandwidth efficient H.264 compression, smooth variable speed positioning and IP66 protection delivering the CohuHD quality and performance you expect!

The 3720^{HD} includes a 720p30 with a 30x optical zoom power, delivering full frame rate HD images over the entire zoom range.

The built-in zoom capability enables up to 30x optical magnification in high definition and achieves quick subject tracking through its high speed auto focusing system.

True day/night technology using a removable IR cut filter produces exceptional low light sensitivity down to 0.005 lx.

For installations subject to wind or vibration movement, electronic image stabilization assures a steady, clear image and enables the system designer to potentially utilize existing bridge signs and traffic light poles for camera mounting.

The 3720HD includes a defog image processing capability, enhancing video performance in foggy conditions encountered in surveillance and traffic monitoring applications.

The 3720^{HD} includes a variable hi-speed pan and tilt drive, with 360° continuous pan and +5 to -90° tilt. Fast positioning speeds result in 180° movements in less than two seconds.

Providing multiple video stream capability, the 3720^{HD} delivers two independently configured H.264 streams or an H.264 with MJPEG.

The 3720^{HD} provides a full function web server, allowing complete administrative and operator control capabilities. Administrative features include configuring network settings, user password assignments, setting video streaming properties, configuring camera imaging

properties, defining presets, tours, patterns and assigning camera ID labels.

The 3720^{HD} is designed to operate in harsh weather with its IP66 enclosure protection. This minimizes the effects of water intrusion, pollutants and corrosives.

CohuHD delivers years of clean, reliable images and backs it with a world class two year warranty.

COHU HD COSTAR

www.cohuhd.com
CohuHD reserves the right to change specifications without notice

For design help, accessories or pricing, please contact:
sales@avsupply or call: 1-858-565-1101

POSITIONING DRIVE

Pan Range	360° Continuous Rotation
Tilt Range	5° to -90° [Continuous tilt with image flip and rotation at -90°]
Manual Pan Speed	0.5° to 110°/second
Manual Tilt Speed	0.5° to 90°/second
Peak Preset Speed	Maximum 350°/second
Preset Speed	< 1 second for 180° movement
Repeatibility	+/- 0.1°
Resolution	+/- 0.1°
Presets	64, Includes Pan, Tilt, Zoom
Tours	4, Inlcudes 27 Presets with individual dwell times
Patterns	4, Up to 40 minutes of recorded patterns
Auto Park	Returns to a Preset, Tour or Pattern after timer expires, Timer Value [Off, 1 Minute to 999 Hours]
Sector Zones	8, Includes left/right boundary, enabled/disabled state, 24 Character Title
Privacy Zones	8 user programmable masks
Inverted Operation	Not Applicable

CAMERA

Sensor	1/3" CCD
Scanning	Progressive
Pixel Array	1296 x 966
Resolution	1280 x 720
Frame Rate	30 fps
Camera Format	Day/Night (Removable IR Cut)
Day/Night Modes	Auto, Color, B/W

SENSITIVITY @ 50 IRE

Color, 1/30, f1.6	0.5 lux (0.05 fc)
B/W, 1/30, f1.6	0.05 lux (0.005 fc)

SENSITIVITY @ 30 IRE

Color, 1/30, f1.6	0.3 lux (0.03 fc)
B/W, 1/4, f1.6	0.005 lux (0.0005fc)

OPTICS

Zoom Lens	30 x, 4.4 to 132mm
Aperture	f1.4 -> f4.6
HAFOV	62.9° to 2.2°
Focus	Auto / Manual [Near, Far]
Iris	Auto / Manual [Open, Close]
Digital Zoom	2 x

IMAGE PROCESSING

Defog Mode	Off/On [3 Levels + Color Saturation]
Image Stabilization	Off/On [5 Hz or 10 Hz]
Dynamic Range	On/Off
Back Light Comp	On/Off
Shutter/Integration	1/4 -> 1/10,000
S/N Ratio	>58 db weighted

IP VIDEO

Streams	Two (2) Individually configurable streams
Codecs	H.264 and MJPEG
Configurations	H.264 + H.264, H.264 + MJPEG
Resolutions	Stream 1 [720p, D1), Stream 2 [D1, CIF]
Frame Rates	30, 15, 7.5, 6, 5, 3.75, 3, 2, 1.875, 1 (stream 2 must be <= to stream 1 frame rate)
Data Rates	Stream 1 (6 Mb to 256 Kb); Stream 2 (2 Mb to 256 Kb)
Camera Latency	Four (4) Frames (0.133 sec.)

ANALOG VIDEO

Video	NTSC or PAL, using full 16:9 image compressed into 4:3 aspect ratio. Stream 2 must be configured for analog video.

VIDEO CONNECTIONS

RTP/RTSP	Eight (8) H.264, Eight (8) MJPEG
RTSP Interleave	Eight (8) H.264, Eight (8) MJPEG
RTSP/SDP Multicast	Eight (8) H.264, Eight (8) MJPEG
HTTP/SDP Multicast	Unlimited, H.264 and MJPEG
HTTP Tunneling	Two (2) H.264, Ten (10 MJPEG
MPEG2 TS	Unlimited, H.264 and MJPEG
HTTP MJPEG Pull	Ten (10)
HTTP MJPEG Push	Ten (10)

NETWORK INTERFACE

Network Format	Ethernet 802.3 (100BaseT-TX)
Network Protocol	TCP, UDP, IPv4, IGMP, ICMP, DNS, DHCP, RTP, RTSP, NTP, HTTP, ARP, ONVIF Profile S
Media Players	VLC, Quick Time or any media player compliant with RFC 2326, 3984, 3550, 2435, ISO/IEC 13818-1

ONVIF	Profile S
Camera Protocols	Cohu T, Profile S, NTCIP 1205
Security	Yes, 4 Levels

ON SCREEN DISPLAY (OSD)

IP VIDEO OSD

Up to four OSD elements are selectable for inclusion in the camera's two IP video streams. (Note: Three elements maximum on a single stream. The OSD elements display on top or bottom of image, on right side of video. The logo element displays on top or bottom of image on left side.

Standard Font Size

Camera Title	24 characters
Preset ID	24 characters
Sector Zone	24 characters
Positiion	3 characters, absolute or compass reading
Time/Date	24 Hour Format, Time Zone
Logo Display	xxx.bmp format, 96 x 96pixels maximum, in multiples of 32 pixels

Large Font Size

Camera Title	15 characters
Positiion	3 characters (pan absolute or compass reading)

EVENT MANAGEMENT
DIGITAL I/O

Digital Inputs	Two (2) Sensor Inputs, Dry contact, N.O or N.C
Digital Outputs	One (1) Control Output, Open collector, 500mA sink

TRIGGERS

Internal Timer	Interval [Off, 1 Second to 999 hours], Duration [Off, 1 Second to Indefinate]
Digital Inputs	Active Input Triggers Action

ACTIONS

Presets	Activates a Camera Preset
FTP Snapshot	Captures Image and sends to FTP site folder
Digital Output	Activates a Digital Output
EMAIL	Sends message to EMAIL address

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MECHANICAL

Construction/Finish	Powder coated aluminum. External parts corrosion protected with stainless steel fasteners.
Weight	14 lbs (6.3 kg)
Dimensions	9.0" D x 13.0 H [228 mm x 330 mm]
Connector Type	18 Pin MS
Shipping Dim's	19 lbs, [8.6 Kg] 19" x 15" x 15" (482mm x 381mm x 381mm))

ELECTRICAL

Input Voltage	24 Vac or PoE+, Auto Detect
Power	PoE+: 15 W heater off, 30 watts max. 24 Vac: 15 W heater off, 60 watts max.
Transients	CISPR 22/24

ENVIRONMENTAL

Protection Rating	IP66
Operating Temp	PoE+ Power: -22F to 167F [-30 C to 75C]
	24 Vac Power: -31F to 167F [-35 C to 75C]
	Minimum without heater: -13F [-25 C]
	Note: Minimum operating temperatures are with a 2 hour warm-up.
Humidity	5-95%
Vibration	Compliant to NEMA TS2 Para 2.1.9, 2.2.3, 2.2.8
Shock	Compliant to NEMA TS2 Para 2.1.10, 2.2.4, 2.2.9

CERTIFICATIONS
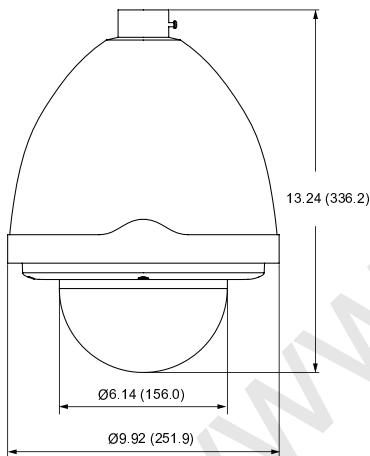
FCC Class A
EN55022:2010 (CISPR22)
EN55024:2010 (CISPR24)

ACCESSORIES

Mounts
Pendent	2010850-001
Wall	2010850-002
Pole	8179-3
Corner	8179-4

Cables
  CA273 Series

Connectors
Pigtail	8498-3
Field Cable	8498-1

Power Supplies
PoE+ (IP50)	7411539-001
24Vac (IP66)	7411543-010 (96 Watts, 115Vac or 220Vac Input)

ORDERING MODEL NUMBERS

3724-1000	IP66, HD 720p, 30x PTZ Dome

DIMENSIONS

13.24 (336.2)
Ø6.14 (156.0)
Ø9.92 (251.9)

CONNECTOR PINOUTS

AMP Connector Pinouts

Pin	Function
1	Alarm Out
2	Alarm In 1
3	Alarm In 2
4	Ethernet PoE -
5	Ethernet PoE -
6	Ethernet PoE +
7	Ethernet PoE +
8	Ethernet TX +
9	Ethernet TX -
10	Ethernet RX +
11	Ethernet RX -
12	Not connected
13	24 Vac High
14	Alarm Common
15	24 Vac Ground
16	24 Vac Low

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