H.264/H.265 High-Definition, IP68 Camera Positioning System



Lifetime Warranty **Camera Head Moisture Ingress IP68 Protection**

















Made in the USA & NDAA Compliant

CostarHD's 4260HD camera positioning system combines crystal clear HD image quality, bandwidth efficient H.264/H.265 compression, smooth variable speed positioning and IP68 protection delivering the CostarHD quality and performance you expect!

The 4260HD provides full 1080p60 imaging with 30x optical zoom, delivering full frame rate HD images over the entire zoom range for very cost effective long-range surveillance applications.

True day/night technology using a removable IR cut filter produces exceptional low light sensitivity down to 0.0000005 fc.

For installations subject to wind or vibration, electronic image stabilization assures steady, clear images.

The 4260HD includes defog/dehaze image processing, enhancing video performance

Advanced Optics

- Superior 1080p60 image quality
- Powerful 30x optical zoom with 12x digital zoom (360x total)
- Extreme low-light sensitivity of 0.0000005 fc
- Image defog/dehaze analytics
- Electronic image stabilization (Super Stabilizer +)
- Superior Wide Dynamic Range of 130db

Rugged Construction

- Designed Specifically for the ITS market
- Operates in hurricane force winds
- Built-in electrical transient/surge protection to CISPR 24 levels
- Precision positioning of 0.05°
- Pressurized IP68 Camera Head
- NEMA® TS2 temperature, -40°C to 75°C
- Lifetime Warranty on moisture ingress into camera head enclosure

Command Core+™ Action Engine

- Automated camera responses
- Preset/Tour activations
- Digital I/O triggers and actions
- Image snapshots with FTP/EMAIL delivery
- Built-in Configuration Wizards

in foggy and hazy conditions encountered in surveillance and traffic monitoring applications.

The 4260HD includes variable hi-speed pan and tilt drive, with 360° continuous pan and 360° tilt. Fast positioning speeds result in 180° movements in less than 2 seconds.

Providing multiple video stream profiles. the 4260HD delivers up to 4 independently configured H.264/H.265/MJPEG streams as well as analog video output with serial RS422 camera PTZ control.

Use of the IP and analog output allows integration with analog systems today while providing a smooth transition to HD Video over IP tomorrow.

The 4260HD provides a full function web server using HTML5, allowing complete administrative, live video and operator control capabilities. Administrative features

Installation and Interoperability

- ONVIF® Profile S and T compliant
- NTCIP 1205 compliant
- Hybrid IP/analog video-serial PTZ operation
- H.264, H.265 and MJPEG encoding
- Web server configuration, operation and viewing
- Inverted mounting capability
- Single CAT5e or CAT6 cable with PoE++
- Presets, tours, sectors and privacy zones
- LDAP, RADIUS, TACACS+ user authentication

Intelligent ITS Video Analytics:

- Vehicle Detection, Count and Speed, % Change of Speed (Included as standard feature in all models)
- Vehicle Classification*
- Traffic Incident Detection* (Stopped Vehicle, Wrong Way Direction)
- Pedestrian Detection*

include configuring network settings, user password assignments, setting video streaming properties, configuring camera imaging properties, defining presets and tours and assigning camera ID labels.

The RISE action engine generates automatic system responses to input triggers including digital inputs, date/time schedules and repetitive timers that can activate output actions including presets, image snapshots with FTP/EMAIL uploads, OSD displays and digital outputs.

The 4260HD is designed to operate in harsh weather with its purged and pressurized IP68 enclosure protection. This eliminates the effects of water intrusion, pollutants and corrosives.

CostarHD delivers years of clean, reliable images and backs it with a world class three-year warranty.















H.264/H.265 High-Definition, IP68 Camera Positioning System



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Sensor 1/2.8" STARVIS2
Scanning Progressive
Resolution 1,920 x 1,080 (1080p)

Capture Rate 60 fps

Camera Format Day/Night (IR Cut Filter)

S/N Ratio >50db

SENSITIVITY

 Standard
 (f1.6, 1/30, 50 IRE)

 Color
 0.009 lux (0.0008 fc)

 B/W
 0.00008 lux (0.000007 fc)

 Digital Slow Shutter
 (f1.6, 1/3, 30 IRE)

 Color
 0.0012 lux (0.0001 fc)

 B/W
 0.000005 lux (0.0000005 fc)

OPTICS

Zoom Lens 30x, 4.3 to 129mm Aperture f1.6 -> f4.7 HAFOV 63.7° to 2.1°

Focus Modes Auto/Manual [Near/Far], Normal, Interval, Zoom

Trigger

Focus Sensitivity Normal/Low

Iris Auto/Manual [Open/Close]
Lens Speed Three [Slow, Medium, Fast]
Digital Zoom 12x, Off/On [Depth]

IMAGE PROCESSING

Day/Night Mode Auto, Color, B/W Exposure Mode Auto/Manual Back Light Comp Off/On

Shutter Auto/Manual [1/1 ->

1/10,000]

Digital Slow Shutter Off/On [1/30->1/1] with

Limit Setting

Defog Mode Off/On/Auto [Defog Strength]

Image Stabilization Off/On

Dynamic Range 130db, On/Off [Normal,

Enhanced]

White Balance Auto, Indoor, Outdoor,

ATW, Sodium Vapor (Fix/ Auto/Outdoor Auto)

AGC 14 to 50db, Adjustable
Noise Reduction Off/2D[NR Level]/3D [NR

Level]

IP STREAM

Video Streams 4 independently configurable

dependent on available processing budget

Video Codec H.264 [M, H]/H.265 [M],

MJPEG RTSP/RTP

Video Protocols RTSP/RTP

RTSP Interleave HTTP Tunneling RTP Multicast

Video Resolution 1080p, 720p, D1 (NTSC and

PAL), VGA, CIF, QVGA

Video Frame Rate Up to 60 fps, 30 fps default

Video Data Rate 64Kbps to 8Mbps Video Rate Cntrl CBR, VBR

Video GOV 1 to 600, 30 default
Video Latency Four frames (0.133 sec.)
Video Trans. 99.999% error free

NETWORK INTERFACE

Network Format 802.3u 100Base-T, MDI-X auto-sensing, full duplex
Network Protocol TCP, UDP, IPv4, ICMP, DNS,

IGMPv2/v3, DHCP, RTP, RTSP,

RTCP, NTP, HTTP, SOAP, HTTPS, ARP, FTP, SMTP, SNMP v1|2|3, TLS, SSL, SMTP, QoS, NTCIP, Telnet, 802.1X, ONVIF Profile S and T, TACACS+, LDAP,

Radius, LLDP

Media Players VLC, Quick Time or any

media player compliant with RFC 2326, 3984, 3550, 2435,

ISO/IEC 13818-1

ONVIF Profile S and T

Camera Protocols ONVIF Profile S and T, NTCIP

1205, CohuT, CohuHD legacy, FAST. Pelco D

Security 4 Levels: Admin, Operator,

User, Anonymous [User Name + Password], Digest Authentication, Centralized Authentication

Updates File upload over network

using camera web server interface or OptiCore

Configurations Stored in Non-Volatile

Memory

Browsers Edge, Firefox, Chrome

DIGITAL I/O INTERFACE

Digital Circuits Four digital I/O circuits, user

defined as either input or

output

ANALOG INTERFACE

Protocols

Video Format NTSC or PAL

Serial PTZ RS422, full/half duplex,

1,200 to 115k baud adjustment, data, stop and parity bit configuration.

CohuHD Legacy, Pelco D/P,

Ultrak, NTCIP 1205, A/D,

EAST Javolin

FAST, Javelin

VIDEO ANALYTICS (VA)

ITS Standard Included in all models.

Vehicle Detection, Count and Speed, % Change of Speed, Multiple View Analytics/PTZ Presets

ITS Advanced* Includes ITS Standard plus

Vehicle Classification, Traffic Incident Detection, Stopped Vehicle, Wrong Way

Direction

ITS Pedestrian
Detection*

estrian Includes ITS Standard plus on* Pedestrian Detection

VA Notifications ONVIF Events, SNMP Traps,

Command Core+ Action Engine Output, CSV Files, Web Interface Display

SNMP Traps Vehicle Detected, Wrong

Way Vehicle, Incident, Stopped Vehicle, Speed

Change

COMMAND CORE+ ACTION ENGINE

Input Triggers Digital input, FTP error,

Valid or invalid login, Tour stopped, Timer, Scheduler, Video Analytic Event, Preset reached, PTZ moved, Maintenance,

User command

Output Actions Digital Output, Activate

Wiper, FTP Image, Send Email, Send Text, Send Text with Image, Start Preset or Tour, Display OSD Message, Timer and Scheduler On/Off Mode Control, Delay, Reset

System, Clear Analytics Stats

Trigger Queuing User selectable mode.

Processes output actions by trigger priority, first in,

or last in.

Servers Multiple FTP and EMAIL

servers can be configured for use by camera system

ON SCREEN DISPLAY (OSD)

OSD Capacity Up to 8 OSD Elements

can be selected for display on video

OSD Elements Text, Preset, Position,

Compass, Date/Time, Sector, Maintenance,

Action Event

OSD Characters Up to 40 characters per text

element

OSD Size Adjustable from 12, 18, 24,

30, 36, 42, 48, 54, 60, 72,

84 or 96 pt. size

White, Black, Green, Red,

Blue

OSD Transparency
OSD Background
OSD Location

OSD Location

Adjustable from 0-100%
Transparent, Black
Upper Right/Left, Lower
Right/Left, Center, Custom

Banner Display On/Off, Top/Bottom, 4

OSD elements

Logo Display BMP, GIF, JPEG, PNG Format,

[x,y] Position, Transparency

OSD Color

^{*} License Fee Required

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PRIVACY MASKS

Up to 24 rectangular masks, Capacity displayed on 8 places per screen simultaneously.

Color Two colors

Mask Interlock Mask positions and size

> are scaled and interlocked with PTZ movements

POSITIONING DRIVE

360° continuous rotation Pan Range

Tilt Range

Preset Speed Peak speed of 120°/sec

180° movement < 2 seconds

Manual Speed 0.05° up to 90°/second **Tracking Speed** 0.05° up to 90°/second **Speed Resolution** Up to 100 variable speeds

Repeatability +/- 0.05° +/- 0.05° Resolution

Presets Up to 256, Includes pan, tilt,

zoom, focus, preset ID, I/O

output state

Tours Up to 256, Includes presets with dwell, speed, direction

and recurrence properties Returns to a preset or tour

after timer expires, Timer Value [Off, 1 Minute to

999 Hours1

Features Auto focus/iris on PTZ,

> Proportional PTZ, Video freeze on preset, High wind/vibration mode, Set/Clear north calibration,

Inverted mounting mode

ELECTRICAL

Power

Auto Park

PoE++, 24VAC/DC or Input Voltage 120VAC, model dependent

Typical 30W, up to 60W with

heaters ON

Voltage Range PoE++ and 120VAC - NEMA

> standard TS 2-2003 section 2.2.7 tests C thru H 24Vac, 18VAC to 28VAC at camera connector

> 24VDC, 20VDC to 28VDC at camera connector

Transient/Surge Certified to CISPR 24 levels Certified to CISPR 22 levels **Emissions**

Pigtail Cable(s) Approx. 24"

MECHANICAL

Weight 21.5 pounds (9.75 kg

Dimensions Refer to dim. diagram Construction Powder coated aluminum **Faceplate Optically Correct Glass** Faceplate Wiper Model Dependent, [On/Off,

Dwell, Time Out Settings]

Sunshield Included as standard Inverted Mounting Yes. Software selectable Connectors RJ45, AMP, MS, Model

dependent

Color Light Gray Cardinal Coating

T241-GR142

ENVIRONMENTAL

Camera - IP68 per **Protection Rating**

> IEC 60529, Pressurized with Dry Nitrogen, 3.5 psi. Positioner Body - IP66

Operating Temp -29° to 165°F (-34° to 74°C)

Per NEMA TS2 2.2.7

Heaters Heaters are software

controlled for managing proper internal temperature of camera system. The faceplate heater is ITO coated glass designed to maintain outer faceplate surface temperature above

32° (0°C) down to -4° (-20°C)

Humidity 0 to 100%, condensing Vibration Per NEMA TS2 para. 2.2.8. 5-30Hz sweep @ 0.5g

applied in each of 3 mutually perpendicular planes.

Shock Per NEMA TS2 para. 2.2.9. 10g applied in each of 3 mutually perpendicular

planes

Corrosion MIL-STD-810H, Method

509.7, Paragraph 4.5.2 All external fasteners 304/316 Stainless Steel **IK10 Excluding ITO**

Impact Rating coated glass

Wind Survavability Up to 150mph

120mph for 45 minutes 150mph for 15 minutes

Per ISTA 3A, Package Drop

Sequence 3 and 6

CERTIFICATIONS

CE, FCC Part 15B (with ICES-003 issue 7), ROHS CE Mark Europe/AS/NZS

FCC CAN/CSA/North America EN 55032

EN 55035 IEC 61000-3-2 IEC 61000-3-3

IEC 61000-4-2

IEC 61000-4-3 per CISPR 35 IEC 61000-4-4 per CISPR 35 IEC 61000-4-5 per CISPR 35 IEC 61000-4-6 per CISPR 35 IEC 61000-4-8 per CISPR 35

IEC 61000-4-11 per CISPR 35

ACCESSORIES

Mounts

Pedestal 7411542-001, 7411444-001,

7411444-002, 7411444-003,

or 7411444-004

Wall 8425-7 Pole 8503-0 7.0" BC Plate 8481-9

IP Field Cables

8194603-xxx [where xxx CAT5e Cables

> = 025, 055, 100, 150, 200, 250, 300, 328] denoting cable length in feet. Includes RJ45 connectors at each end of cable compliant with EIA/

TIA-568-B standard

Accessory Cables

CA277, CA278 Series

Power Supply

7412007-003 PoE++, 60W, 110/220VAC

IP50, -34 to 74°C

7411543-010 24Vac, 100VA, 110/220VAC,

IP66. -34 to 74°C

7412007-004 PoE++, 60W, 12-48VDC Input, IP50, -40 to 74°C, DIN Rail

PD-9501GO-ET Outdoor IP67 Rated PoE++

Power Supply, Surface

Mount, -40 to 65°C

RJ45 Coupler

7610203-002 CAT5/6 RJ45 IP67 Coupler

RJ45 IP67 Coupler, p/n 7610203-002. CAT5e/6/6a

Ethernet Surge Protection

7412009-001 Outdoor IP67 rated

ethernet/PoE++ surge protection device

WARRANTY

Three (3) years on camera and positioner system. Lifetime warranty on camera enclosure moisture ingress.

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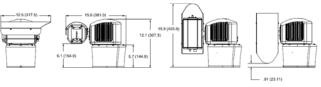
PIGTAIL CONFIGURATIONS

RJ45 Connector Pin Outs					
	Function	Function			
Pin	Pinout A	Pinout D			
1	ETHERNET TX+, POE++ [-]	ETHERNET TX+			
2	ETHERNET TX-, POE++ [-]	ETHERNET TX-			
3	ETHERNET RX+, POE++ [+]	ETHERNET RX+			
6	ETHERNET RX-, POE++ [+]	ETHERNET RX-			
5	POE++ [+]	N/C			
4	POE++ [+]	N/C			
7	POE++ [-]	N/C			
8	POE++ [-]	N/C			

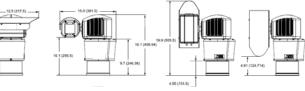
	Prepped Accessory Cable		
	Function		
Prepped Wires	Pinout B	Pinout E	
ORN	DIO 1	DIO 1	
WHT/BLK	DIO 2	DIO 2	
RED/GRN	DIO 3	DIO 3	
BLU	DIO 4	DIO 4	
YEL	N/A	N/A	
BRN	I/O COMMON	VO COMMON	
WHT (26 AWG)	RS422 RX+	RS422 RX+	
BLK (26 AWG)	RS422 RX-	RS422 RX-	
RED (26 AWG)	RS422 TX+	RS422 TX+	
GRN (26 AWG)	RS422 TX-	RS422 TX-	
COAX VIDEO (WHT)	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT	
COAX SHIELD (BLK)	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD	
BLK (22 AWG)	N/C	24 VAC	
WHT (22 AWG)	N/C	24 VAC	

MS Cable								
MS Connector	Function							
	Pinout C	Pinout F	Pinout G	Pinout H	Pinout I	Pinout M		
С	DIO 1	POE++ [-]						
К	DIO 2	POE++ [-]						
J	DIO 3	DIO 1						
P	VO COMMON	I/O COMMON	I/O COMMON	I/O COMMON	VO COMMON	DIO 2		
М	RS422 RX+							
N	RS422 RX-							
S	RS422 TX+							
R	RS422 TX-							
L	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPU						
A	ANALOG VIDEO SHIELD							
В	N/A	24 VAC	24 VAC	N/C	N/C	POE++ [+]		
T	N/A	24 VAC	24 VAC	120 VAC LO	120 VAC LO	POE++ [+]		
G	CHASSIS	CHASSIS	CHASSIS	CHASSIS	CHASSIS	CHASSIS		
U	N/C	N/C	N/C	120 VAC HI	120 VAC HI	I/O COMMON		
Н	N/C	N/C	ETHERNET RX-	ETHERNET RX-	N/C	ETHERNET RX-		
D	N/C	N/C	ETHERNET TX+	ETHERNET TX+	N/C	ETHERNET TX+		
E	N/C	N/C	ETHERNET TX-	ETHERNET TX-	N/C	ETHERNET TX-		
F	N/C	N/C	ETHERNET RX+	ETHERNET RX+	N/C	ETHERNET RX+		

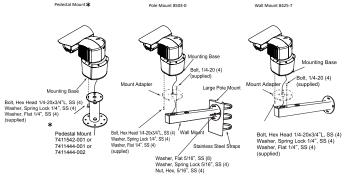
DIMENSIONS FOR 4261 THROUGH 4266 MODELS



DIMENSIONS FOR 4267 THROUGH 426B MODELS



MOUNTING EXAMPLES



MODEL INDEX CONFIGURATION

RISE 4260HD Series IP68 Camera Positione Power/Pigtail Options

- PoE++ Power, RJ45 Pigtail, Accessory Pigtail
- PoE++ Power, RJ45 Pigtail, MS Conn. Accessory Pigtail 24 VAC Power, RJ45 Pigtail, Accessory Pigtail, Wires
- 24 VAC Power, RJ45 Pigtail, Accessory Pigtail, MS Conn.
- 24 VAC Power, MS Connector Pigtail
- 120VAC Power, MS Connector Pigtail, Helios Pinout
- 120VAC Power, MS Connector Pigtail, RJ45 Whip, i-Series Pinout 120VAC Power, AMP Connector Pigtail, RJ45 Whip, i-Series Pinout
- 120VAC Power, AMP Connector Pigtail, Helios Pinout
- 120VAC Power, AMP Connector Pigtail, Caltrans D11 Pinout PoE++ Power, 10ft RJ45 Pigtail
- PoE++ Power, RJ45 Pigtail, 3" Pedestal Mount
- PoE++ Power, MS Connector Pigtail
- PoE++ Power, 50ft RJ45 Pigtail

Camera Options

HD 1080p 30x Camera Module

using Options None

Faceplate Wiper

Software Options

Accessory Kits

0001 Contact Factory 0002 Contact Factory Contact Factory Model Number S

EXAMPLE: 4261-1100-0000-04

OPTIONAL ITS ANALYTICS

R-ITS-ADV Advanced ITS Analytics: Provides ITS Standard Features

PLUS Vehicle Size (Classification), Incident Detection, Stopped Vehicle, Wrong Way Direction.

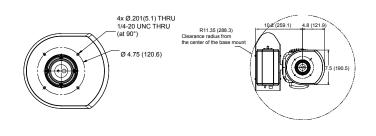
R-ITS-PED Pedestrian Detection: Provides ITS Standard Features PLUS

Pedestrian Detection.

R-ITS-ADP Advanced ITS + Pedestrian: Provides ITS Standard Features

PLUS Advanced ITS & Pedestrian Detection Features.

MOUNTING BOLT PATTERN CLEARANCE



RISE Series IP Video Cameras

Rugged Innovation with Superior Endurance

The RISE Series IP video cameras and designed and built by CostarHD for critical infrastructure applications demanding high-quality images, rugged construction and seamless interoperability. The RISE Series delivers advanced performance at unbeatable pricing.

About CostarHD™

CostarHD is a leading manufacturer of high-definition video systems designed to satisfy the demanding performance requirements for critical infrastructure applications. CostarHD solutions integrate the latest high-definition video imaging and compression technologies into ruggedized camera products for monitoring in critical, sensitive environments.