RISE 4260HD Series with Command Core+™

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

RISE COMMAND CORE+

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

ONVIF® S T   NTCIP™   **FDOT APL Approved**

HYBRID ANALOG & IP   CE   NEMA National Electrical Manufacturers Association

Made in the USA & NDAA Compliant

Advanced Optics

- Superior 1080p60 image quality
- Powerful 30x optical zoom with 12x digital zoom (360x total)
- Day/Night ICR Technology
- Extreme low-light sensitivity of 0.00008 fc
- Image defog/dehaze analytics
- Electronic image stabilization (EIS)
- Superior Wide Dynamic Range of 130db
- 2D/3D Image Noise Reduction
- Superior Color Rendition

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
- Three Year Standard Warranty
- Lifetime Warranty on moisture ingress into camera head enclosure

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
- ITS optimized video analytics
- HTML5 video decoding
- Web server configuration, operation and viewing
- Inverted mounting capability
- Single CAT5e cable with PoE++
- Pendent, wall and pole mounting bracket options
- Presets, tours, sectors and privacy zones
- LDAP, RADIUS, TACACS+ user authentication

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
- Three trigger queuing modes

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 0.00008 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 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 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.

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CostarHD.com

(858) 391-1800

COSTAR HD

4260HD.03.6

CAMERA

Sensor	1/2.8" Exmor R CMOS
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	0.01 lux (0.001 fc)
B/W	0.0015 lux (0.00015 fc)
Digital Slow Shutter	(f1.6, 1/3, 30 IRE)
Color	0.0013 lux (0.00013 fc)
B/W	0.0008 lux (0.00008 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
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

Video Format	NTSC or PAL
Serial PTZ	RS422, full/half duplex, 1,200 to 115k baud adjustment, data, stop and parity bit configuration.
Protocols	CohuHD Legacy, Pelco D/P, Ultrak, NTCIP 1205, A/D, 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*	Includes **ITS Standard** plus 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
OSD Color	White, Black, Green, Red, Blue
OSD Transparency	Adjustable from 0-100%
OSD Background	Transparent, Black
OSD Location	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

* License Fee Required

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RISE COMMAND CORE+

PRIVACY MASKS

Capacity	Up to 24 rectangular masks, 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

Pan Range	360° continuous rotation
Tilt Range	350°
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°
Resolution	+/- 0.05°
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
Auto Park	Returns to a preset or tour after timer expires, Timer Value [Off, 1 Minute to 999 Hours]
Features	Auto focus/iris on PTZ, Proportional PTZ, Video freeze on preset, High wind/vibration mode, Set/Clear north calibration, Inverted mounting mode

ELECTRICAL

Input Voltage	PoE++, 24VAC/DC or 120VAC, model dependent
Power	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
Emissions	Certified to CISPR 22 levels
Pigtail Cable(s)	Approx. 24"

MECHANICAL

Weight	21.5 pounds (9.75 kg maximum
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

Protection Rating	Camera - IP68, Pressurized with Dry Nitrogen, 3.5 psi. Positioner Body - IP66
Operating Temp	-40° to 167°F (-40° to 75°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-810G, Method 509.5, Paragraph 4.5.2, ANSI NCSL Z540-1, ISO 17025:2005
Impact Rating	IK10
MTBF	251,000 hours, based on HALT Steady State Field MTBF calculations

CERTIFICATIONS

FCC Part 15B Class A
CE, RoHs
EN 55022: 2010+AC: 2011
AS/NZS CISPR 22:2009 +A1:2010
CAN/CSA-CISPR 22-10
EN 55024: 2010
EN 61000-3-2: 2006+A1:2009+A2:2009
EN 61000-3-3: 2013
SASO (Pending)

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

CAT5e Cables	8194603-xxx [where xxx = 025, 055, 100, 150, 200, 250, 300, 328] denoting cable length in feet. Includes RJ45 connectors at each end of cable.

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 shielded cable with a 6mm or 8.2 mm O.D. is required for waterproofing

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

Pin	Function	
	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

Prepped Wires	Function	
	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	I/O 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

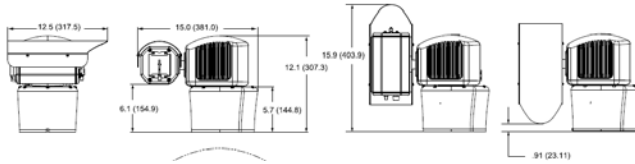| MS Connector	Function					
	Pinout C	Pinout F	Pinout G	Pinout H	Pinout I	Pinout M
C	DIO 1	DIO 1	DIO 1	DIO 1	DIO 1	POE++ [-]
K	DIO 2	DIO 2	DIO 2	DIO 2	DIO 2	POE++ [-]
J	DIO 3	DIO 3	DIO 3	DIO 3	DIO 3	DIO 1
P	I/O COMMON	I/O COMMON	I/O COMMON	I/O COMMON	I/O COMMON	DIO 2
M	RS422 RX+	RS422 RX+	RS422 RX+	RS422 RX+	RS422 RX+	RS422 RX+
N	RS422 RX-	RS422 RX-	RS422 RX-	RS422 RX-	RS422 RX-	RS422 RX-
S	RS422 TX+	RS422 TX+	RS422 TX+	RS422 TX+	RS422 TX+	RS422 TX+
R	RS422 TX-	RS422 TX-	RS422 TX-	RS422 TX-	RS422 TX-	RS422 TX-
L	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT	ANALOG VIDEO OUTPUT
A	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD	ANALOG VIDEO SHIELD
B	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
H	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+

MODEL INDEX CONFIGURATION

Product Series
- 426   RISE 4260HD Series IP68 Camera Positioner

Power/Pigtail Options
- 1   PoE++ Power, RJ45 Pigtail
- 2   PoE++ Power, RJ45 Pigtail, Accessory Pigtail
- 3   PoE++ Power, RJ45 Pigtail, MS Conn. Accessory Pigtail
- 4   24 VAC Power, RJ45 Pigtail, Accessory Pigtail, Wires
- 5   24 VAC Power, RJ45 Pigtail, Accessory Pigtail, MS Conn.
- 6   24 VAC Power, MS Connector Pigtail
- 7   120VAC Power, MS Connector Pigtail, Helios Pinout
- 8   120VAC Power, MS Connector Pigtail, RJ45 Whip, i-Series Pinout
- 9   120VAC Power, AMP Connector Pigtail, RJ45 Whip, i-Series Pinout
- A   120VAC Power, AMP Connector Pigtail, Helios Pinout
- B   120VAC Power, AMP Connector Pigtail, Caltrans D11 Pinout
- C   PoE++ Power, 10ft RJ45 Pigtail
- D   PoE++ Power, RJ45 Pigtail, 3" Pedestal Mount
- E   PoE++ Power, 52in RJ45 Pigtail
- F   PoE++ Power, MS Connector Pigtail
- G   PoE++ Power, 50ft RJ45 Pigtail
- -   **Model Number Separator**

Camera Options
- 1   HD 1080p 30x Camera Module

Housing Options
- 0   None
- 1   Faceplate Wiper

Software Options
- 0   None

Unassigned
- 0   None
- -   **Model Number Separator**

Accessory Kits
- 0000   None
- 0001   Contact Factory
- 0002   Contact Factory
- 0003   Contact Factory
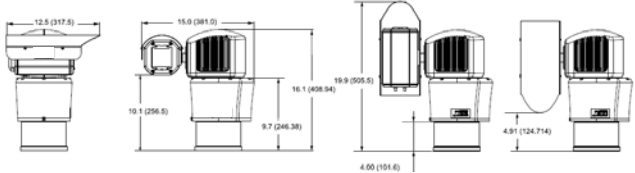- 0004   Contact Factory
- -   **Model Number Separator**
- 03   RISE III

EXAMPLE: 4261-1100-0000-03

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.

DIMENSIONS FOR 4261 THROUGH 4266 MODELS

DIMENSIONS FOR 4267 THROUGH 426B MODELS

MOUNTING EXAMPLES

Pedestal Mount ✳   Pole Mount 8503-0   Wall Mount 8425-7

MOUNTING BOLT PATTERN

4x Ø.201(5.1) THRU 1/4-20 UNC THRU (at 90°)
Ø 4.75 (120.6)

CLEARANCE

R11.35 (288.3) Clearance radius from the center of the base mount

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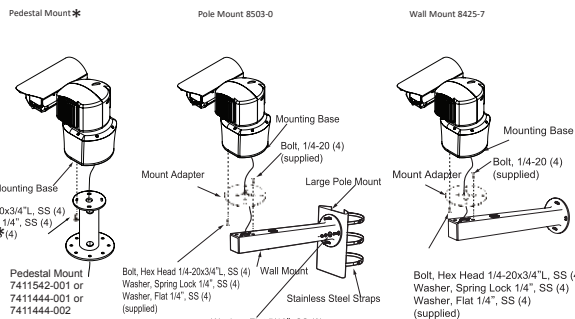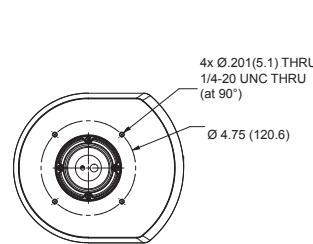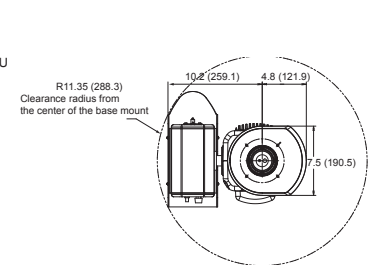
RISE Series IP Video Cameras

Rugged Innovation with Superior Endurance

The RISE Series IP video cameras send 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.