COEX™ C2000 4K IP PTZ Camera Station

The COEX™ C2000 4K IP PTZ Camera Station has a unique compact and lightweight design developed specifically to meet the worldwide demand for surveillance and process monitoring of harsh industrial and marine environments.

The COEX C2000 marine camera stations are manufactured from the highest-grade, corrosion-resistant, electro-polished 316L stainless steel. They are designed for toughness and durability to operate in the most adverse environments, from freezing temperatures to the blistering heat of desert conditions.

This advanced camera station combines 4K video with a 20x optical zoom to deliver high-quality image and detail capture.

Featuring the latest encoding technology (2nd generation IP encoder), the camera station is capable of triple-stream H.264 and H.265 encoding for simultaneous live view and recording.

The C2000 4K IP PTZ Camera Station has cybersecurity measures built-in, including encrypted video streaming, HTTPS, and 802.1x protocols.

COEX camera stations are compatible with a variety of VMS platforms through ONVIF Profile S and T compliance.

Options

- Integral wiper
- COEX MEWS5 wash systems
- IR lamp
- Continuous rotation

SYNECTICS

Specifications

CERTIFICATIONS / RATINGS*5	[OPTIONS]
cCSAus	CLASS 3862 66, CLASS 3862 96, CAN/CSA C22.2 No.62368-1, UL No.62368-1
EMC (US & Can.)	FCC CFR47 Part 15 Class A, ICES-003 Class A
EMC	EN61000-6-2, EN61000-6-4 Class A limits
CE / UKCA	IEC62368-1
DNV	TAA00001M2

ENVIRONMENTAL	
Operating Temperature	-45°C to +60°C [+70°C] / -49°F to +140°F [+158°F]
Storage Temperature	-45°C to +80°C / -49°F to +176°F
Ingress Protection	IP66 & IP67 to IEC60529 Type 6 Enclosure
Salt Mist	IEC60068-2-52 & IEC60945 Section 8.12
Vibration	0.7 g to IEC60068-2-6 & IEC60945
Wind Loading	Operational to 130 km/h, survival to 268 km/h

MECHANICAL	
Material	Electro-polished 316L stainless steel
Window	4K grade toughened glass, thermostatically operated demister [Wiper*2]
Pan Turning Circle	Ø 530 mm / 20.87"
Tilt Turning Circle	Ø 360 mm / 14.17"
Mounting Orientation	Upright or inverted
Mounting Base	4 x M8 tapped holes, equispaced on a 4" (101.6 mm) P.C.D.
Dimensions*1 (W x D x H)	363 x 310 x 338 mm / 14.29" x 12.21" x 13.31"
Weight*1	16 kg / 35.3 lbs
Cable Gland Entries	1 x M20

ELECTRICAL	
Input Power Options	24 V AC/DC (±10%) 50/60 Hz
Power Consumption*1	9 VA Quiescent 68 VA Operating 81 VA Operating (with heater) 100 VA Max
Wash Control*1	24 V AC/DC (0.75 A max) switched output
Auxiliary Inputs*3	1 x contact closure input (5 V pull up) [additional inputs available on request]
Relay Outputs*3	1 x volt free switched output (24 V 0.75 A max) [up to 2 available on request]
Audio*3	[Line Input]

CAMERA OPERATION	362° Rotation	[Continuous Rotation]
Pan Operation	0° to 42°/sec, mechanical limits, programmable soft-stops, preset positioning	0° to 42°/sec, programmable soft-stops, preset positioning
Tilt Operation	180° Rotation, 0° to 21°/sec, mechanical limits, programmable soft stops, preset positioning	
Preset Memory	128 user programmable preset positions (pan, tilt, zoom and focus), preset accuracy <0.05°, absolute positioning	
PTZ Features	Proportional pan and tilt control in relation to zoom depth, intelligent focus	
Wash/Wipe*1	[Optional wash/wipe with auto-wiper off]	
ONVIF Control Features	PTZ control (continuous, relative and absolute), focus control, preset store/recall, auxiliary controls (wash/wipe/lamps/auto focus), wash/wipe and lamps control mappable to ONVIF presets for control systems that have no support for auxiliary commands, alarm inputs, and relay outputs	
IR Lamp Control*1	Manual/auto control of a connected IR lamp	
IR Focus Compensation*1	Manual/auto control of IR focus compensation and automatic compensation of focus preset positions	

DAY/NIGHT CAMERA / LENS

Image Sensor	1/2.5 Exmor-R CMOS sensor
Signal System	4K 2160p 25/29.97 FPS FHD 1080p 25/29.97/50/59.94 FPS
Effective Pixels	8.51 mega pixels
Zoom Range	20x zoom (up to 240x with digital zoom)
Focal Length / Aperture	4.4 mm (wide) to 88 mm (tele), F2.0 to F3.8
Angle of View (H)	70.2° (wide) to 4.1° (tele), 60° (wide) to 3.5° (tele) with image stabilizer on
Minimum Illumination (50IRE, High Sensitivity Mode)	0.4 lux (1/30 s) 0.06 lux (1/4 s, 1/3 s)
Minimum Illumination (50IRE)	1.6 lux (1/30 s) 0.21 lux (1/4 s, 1/3 s)
Electronic Shutter	Auto (1/1 to 1/10,000 s, 28 steps)
Signal/Noise Ratio	> 50 db (weight on)
Features	Digital zoom on/off, auto/manual focus, auto/manual iris, auto/manual IR cut filter remove (ICR), auto exposure (AE), automatic gain control (AGC), auto white balance (AWB), backlight compensation (BLC), auto slow shutter, visibility enhancer (VE), defog, highlight compensation (HLC), Noise Reduction (NR)
Image Stabilization	EIS

VIDEO ENCODING

Compression Standards	H.264 (MPEG4 part 10/AVC) high, main, base profiles H.265 (MPEG-H part 2/HEVC), MJPEG
Bitrate Mode	Constant Bitrate (CBR), Variable Bitrate (VBR)
Encoding Capability	Up to 3 independently configurable encoded video streams
Stream Bitrate[4]	100 kb/s to 25 Mb/s
Image Resolution[4]	4K (3840 x 2160), Full HD 1080p (1920 x 1080), 720p (1280 x 720), D1 (720 x 576/480), 4CIF (704 x 576), CIF (352 x 288)
Image Rate[4]	HD (up to 60 IPS), 4K (up to 30 IPS)
GOP Structure	I-frame only, 5 to 240 frames
Region of Interest (ROI)	Configurable per encoded video stream, ability to crop a selected area of the image source for encoding (variable resolution and aspect ratio)

AUDIO ENCODING

Compression Standards	ARM AACLC, ARM AACLC MPEG2, ARM AACHE, ARM AACHE V2
Sample Rate	48 kHz, 44.1 kHz, 32 kHz, 16 kHz
Stream Bitrate	12 to 384 kb/s (AACHE and AACHE V2 32 to 64 kb/s)

NETWORK DEVICE

Interface Options	Ethernet (100Base-T, 10-Base-T), Auto/full/half duplex, Auto/10/100, Configurable MTU Size
Protocols	TCP/IP, UDP, ICMP, DHCP, DNS, HTTP, HTTPS, NTP, RTSP/RTP/RTCP, TSRTP, RTMP, RTMPS, SRT, IGMP, SNMP, SYNS, SSL, TLS, 802.1x (EAP)
Control Protocol	SYNS, ONVIF (Profile S, T compliant)
Video Stream Delivery	RTSP/RTP (Unicast: UDP/TCP, Multicast UDP), TSRTP, RTMP, RTMPS, SRT
Network Discovery	SYNS, WS-Discovery (ONVIF)
Device Security	Multiple users and 7 access levels protecting access to the web interface, ONVIF and RTSP services, HTTPS support, HTTP disable, 802.1x (EAP), video streaming disabled until change of default password, unicast stream disable
Supported Internet Browsers	Chrome/Firefox/IE/Edge (No Active-X browser components required)
System Maintenance	Field upgradeable firmware, diagnostic logs Hardware system supervisor providing temperature management, cold-start, auto shut-down and watchdog control

NOTE: *1 Dependent on certification and equipment fitted. *2 Wipers are consumable items that need regular replacement. Please refer to the manual for recommendations and maintenance. *3 Dependent on cable tail option. *4 Maximum permissible resolution, bitrate and framerate per additional stream will be reduced dependent on the configuration of the primary stream. *5 Exact certification requirements must be specified at the time of order.

PART CODE STRUCTURE

C2 - A B C D - E - F G H J

(Example) C2 - 1 V 85 - W - E E X

A - CAMERA HOUSING SIZE

1   Size 1 camera housing

B - FIXED/PTZ

C   PTZ - Continuous pan

V   PTZ - Non-continuous pan

C - DAY/NIGHT CAMERA

85   4K UHD, 20x zoom

D - THERMAL IMAGING MODULE

N/A

E - WIPER

Without wiper

J - SPECIAL

Standard build

X   Special build

H - OUTPUT TRANSMISSION TYPE

E   Ethernet Base-T

G - BASE/MOUNTING TYPE

Standard PTZ mounting

F - TECHNOLOGY SERIES

E   2nd Gen, IP encoder

MANUFACTURER OF

COEX

CAMERA STATIONS

Synectics

synecticsglobal.com