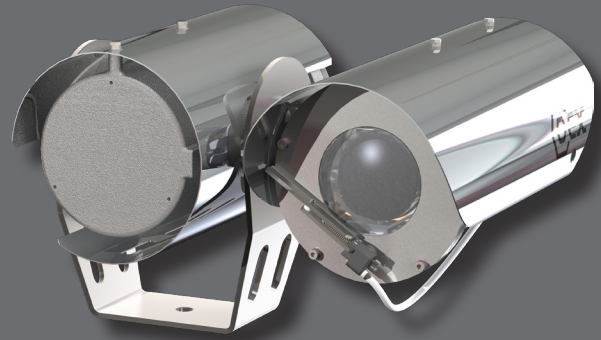# COEX™ C2000 HD LE IP Fixed Camera Station with Integrated Junction Box

The COEX™ C2000 HD LE IP Fixed Camera Station with Integrated Junction Box 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

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 Full HD (1080p) video with a 33x optical zoom to provide exceptional image quality even in low light conditions.

The self-contained junction box also accommodates the management of fiber optic cores, power supply, and optional media converters for signal transmission via direct entry and termination of field cables.

This camera station is a versatile choice for pre-existing systems, ensures a straightforward installation process, and is compatible with a variety of VMS platforms through ONVIF Profile S, G and T compliance.

Options

- Integral wiper
- COEX MEWS5 wash systems
- IR lamp[*1]
- Integral fiber optic transmission
- Various voltage options 24 V AC/DC and (100 to 240) V AC
- Ethernet over coax media converter
- Fiber and copper 3-port switch[*1]
- Video analytics[*9]

IP66/IP67 · DNV · -45°C/+70°C · 316L STAINLESS STEEL · ONVIF|G · ONVIF|S|T · HD 1080P · H.264 H.265 · Quad Streaming · IP Over COAX · Direct Ethernet · CYBERSECURITY · VIDEO ANALYTICS

SYNECTICS

Specifications

CERTIFICATIONS / RATINGS*7	[OPTIONS]
EMC	EN61000-6-2, EN 61000-6-4 Class A limits
CE / UKCA	IEC62368-1, IEC60825-1
DNV	TAA00001M2 Iss 3

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
Salt Mist	IEC60068-2-52 & IEC60945 Section 8.12
Wind Loading	Operational to 130 km/h, survival to 268 km/h
Vibration	0.7 g to IEC60068-2-6 & IEC60945

MECHANICAL	
Material	Electro-polished 316L stainless steel
Window	HD grade toughened glass, thermostatically operated demister [Wiper*2]
Mounting Orientation	Upright or inverted
Mounting Base	1 x Ø 13.5 mm / 0.53" fixing hole
Dimensions*1 (W x D x H)	353 mm x 310 mm x 219 mm / 13.90" x 12.21" x 8.62
Weight*1	14 kg / 30.9 lbs
Cable Gland Entries*3	3 x M20 / [3 x M25] / [3 x 1/2" NPT]

ELECTRICAL	Integrated PSU	[Without Integrated PSU]
Input Power Options	(100 to 240) V AC 50/60 Hz	24 V AC/DC (±10%) 50/60 Hz
Power Rating	1.5 A max @ 100 V (Inrush 30 A max)	-
Power Consumption*1	40 VA Quiescent 40 VA Operating (with heater) 115 VA Max	11 VA Quiescent 14 VA Operating 27 VA Operating (with heater) 30 VA Max
Wash Control*1/4	24 V DC (0.75 A max) switched output [Volt free (2.5 A 250 V AC max) switched output] [Switch live (0.2 A Integrated PSU only) with neutral output]	
Auxiliary Inputs*3	[1 x contact closure input]	
Relay Outputs*3	1 x volt free switched output (24 V 0.75 A max)	
Audio*3	[Line Input/Output]	

CAMERA OPERATION	
Preset Memory	128 user programmable preset positions (zoom, focus)
Wash/Wipe*1	[Optional wash/wipe with auto-wiper off]
ONVIF Control Features	Zoom and focus control, preset store/recall, auxiliary controls (wash/wipe/lamps) [Alarm input] Relay outputs Event metadata
IR Lamp Control*1	Manual/auto control of a connected IR lamp
IR Focus Compensation	Manual control of IR focus compensation
Video Analytics*9	Abandoned object, intrusion detection, camera sabotage, wrong direction, loitering detection, object counting, object removal, stopped vehicle
Video Motion Detection	Variable sensitivity and area masking
Event Notification	HTTP / FTP / SMTP
Audio Detection*3	Variable detection level and time interval
Local Recording*8	Direct to SD card Synectics Intelligent Edge Recording (SIER)

DAY/NIGHT CAMERA / LENS

Image Sensor	1/2.8" Progressive CMOS sensor
Signal System	FHD 1080p 25/30 fps
Effective Pixels	2065 (H) x 1553 (V), Approximately 3 megapixels
Zoom Range	33x optical zoom (up to 330x with digital zoom)
Focal Length/Aperture	4.6 mm (wide) to 152mm (tele)
Angle of View (H)	55° (wide) to 2° (tele)
Minimum Illumination (Color)	0.1 lux
Minimum Illumination (Mono)	0.002 lux
Wide Dynamic Range	True WDR (120 dB)
Electronic Shutter	Auto (1/1 to 1/10,000 s)
Noise Reduction	3D, 2D, color
Features	Digital zoom, auto/manual focus, auto/manual iris, auto/manual day/night mode with IR cut filter remove (ICR), auto/manual exposure, automatic gain control (AGC), auto/manual white balance (AWB), backlight compensation (BLC), auto slow shutter, manual sharpness/contrast/saturation/hue, manual exposure compensation, image tamper alarm, image rotation

VIDEO ENCODING

Compression Standards	H.264 (MPEG4 part 10/AVC) high and main profiles H.265 (MPEG-H part 2/HEVC), MJPEG
Bitrate Mode	Constant Bitrate (CBR), Variable Bitrate (VBR), Low Bitrate (LBR)
Encoding Capability	Up to 4 independently configurable encoded video streams
Stream Bitrate[6]	64 kb/s to 20.48 Mb/s
Image Resolution[6]	Stream 1: QXGA (2048 x 1536), 1080p (1920 x 1080), SXGA (1280 x 1024), 720p (1280 x 720), SVGA (800 x 600), D1 (720 x 480) Stream 2/3/4 additional resolutions: QXGA (2048 x 1536), 1080p (1920 x 1080), SXGA (1280 x 1024), 720p (1280 x 720), XGA (1024 x 768), SVGA (800 x 600), (960 x 544), D1 (720 x 480), VGA (640 x 480), nHD (640 x 360), (352 x 240), (320 x 240)
Image Rate[6]	HD (1 to 60) IPS
GOP Structure	Variable
Region of Interest (ROI)	Ability to crop a selected area of the image source for encoding. Option to increase/decrease encode quality of configurable image regions.

AUDIO ENCODING[1/3]

Compression Standards	uLAW, ALAW, AAC, PCM
Stream Bitrate	16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps, uLAW (64 Kbps), ALAW (64 Kbps), AAC (128 Kbps), PCM (128 Kbps), PCM (256 Kbps), PCM (384 Kbps), and PCM (768 Kbps)

NETWORK DEVICE

Interface Options[5]	Ethernet (100Base-T, 10-Base-T), Auto duplex, Auto/10/100
Protocols	IPv4/v6, TCP/IP, UDP, ICMP, ARP, DHCP, DNS, DDNS, HTTP, HTTPS, NTP, RTSP/RTP, IGMP, SNMP, TLS, PPPoE, QoS, UPnP, SMTP, FTP
Control Protocol[8]	SYNX-HD, ONVIF (Profile S, G, T compliant)
Video Stream Delivery	RTSP/RTP (Unicast: UDP/TCP, Multicast UDP)
Network Discovery	SYNX-HD, WS-Discovery (ONVIF)
Device Security	Permission based password protected web interface and ONVIF/RTSP services, HTTPS support, HTTP disable, IP filter, IEEE 802.1x
Supported Internet Browsers	Microsoft Internet Explorer 11.0 or later / Mozilla Firefox / Google Chrome / Apple Safari
System Maintenance	Field upgradeable firmware, diagnostic logs

[FIBER OPTICS][5]

[FIBER OPTICS][5]	100FxLP	100Fx/20km	100Fx/30km	100WLFxA	1000Lx	1000WLxA
Optical Interface	100Base-Fx	100Base-Fx	100Base-Fx	100Base-Fx	1000Base-Lx	1000Base-Lx
Fibers Required	Dual	Dual	Dual	Single	Dual	Single
Wavelength	1310 nm	1310 nm	1310nm	Tx 1310 nm Rx 1550 nm	1310 nm	Tx 1310 nm Rx 1550 nm
Transmit Optical Power	(-20 to -10) dBm	(-15 to -8) dBm	(-5 to 0) dBm	(-14 to -8) dBm	(-9 to -3) dBm	(-9 to -3) dBm
Receive Sensitivity	< -31 dBm	< -31 dBm	< -31 dBm	<-33 dBm	< -22 dBm	< -22 dBm
Standard Optical Link Budget	> 11 dB	> 16 dB	> 26dB	> 19 dB	> 13 dB	> 13 dB
Optical Connector	LC	LC	LC	SC	LC	SC
Fiber Management	Integral fiber management with termination capacity for spare fiber cores					
Features	[Link loss forwarding, fault detection]				Link loss forwarding, fault detection	

[MEDIA CONVERTER]*⁷	Ethernet over Coax
Connectivity	Auto-optimizing for 75 Ω coaxial cable: 280m (920ft) full-rate over video-grade RG-59 (Up to 350m depending on cable quality) 350m (1150ft) full-rate over RG-6 500m (1640ft) full-rate over RG-11
Interface Data Rate	Auto-configuring for speed (10BASE-T or 100BASE-T) and duplex
Features	Retrofit existing analog CCTV installations to Ethernet-based systems, allow the connectivity of camera stations outside the permitted run length of 100Base-Tx Ethernet Cabling

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 Wash output relay option shall be specified at the time of order. *5 Exact interface option and media type must be specified at the time of order. Maximum transmission distance dependent on cable infrastructure quality and integrity. 6* Maximum permissible resolution, bitrate and framerate per additional stream will be reduced dependent on the configuration of the primary stream. *7 Exact certification requirements must be specified at the time of order. *8 A supported SD memory card is required for profile G, please refer to the manual for recommendations. *9 Video analytics feature requires a separate license. Use of video analytics may require a reduced ambient temperature range.

PART CODE STRUCTURE

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

(Example) C2 - 1 F 33 - W - L 3 E X

A - CAMERA HOUSING SIZE

| 1 | Size 1 camera housing |

B - FIXED/PTZ

| F | Fixed |

C - DAY/NIGHT CAMERA

| 33 | FHD, 33x zoom |

E - WIPER

	Without wiper
W	Standard wiper
B	Brush wiper

J - SPECIAL

| | Standard build |
| X | Special build |

H - OUTPUT TRANSMISSION TYPE

C	Coax
U	UTP
E	Ethernet Base-T
S	Singlemode fibre
M	Multimode fibre

G - BASE/MOUNTING TYPE

| 3 | Base type 3 (with PSU) |
| 4 | Base type 4 (without PSU) |

F - TECHNOLOGY SERIES

| L | LE Series, IP encoder |

MANUFACTURER OF

COEX

CAMERA STATIONS

Synectics
synecticsglobal.com