

# COEX™ C3000 HD LE IP Fixed Camera Station

The COEX™ C3000 HD LE IP Fixed Camera Station has a unique compact and lightweight design developed specifically for hazardous-area applications. C3000 camera stations are designed for both toughness and durability as demanded for operation in the most adverse of environments.



COEX C3000 hazardous-area camera stations operate in the most extreme environments worldwide. Designed for toughness, durability, and certified to perform in ambient temperatures from -55°C to +70°C without compromise, they are ideal for oil and gas, marine, and industrial installations.

This advanced camera station combines Full HD video with a 33x optical zoom to deliver high-quality image and detail capture.

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

### Options

- Integral wiper
- COEX FEWS3 wash systems
- IR lamp\*<sup>1</sup>
- Video analytics\*<sup>9</sup>

 ATEX		 US
		
 IP66/IP68	 -55°C/+70°C	 316L STAINLESS STEEL
 HD 1080P	 H.264 H.265	 Quad Streaming
 Direct Ethernet	 CYBERSECURITY	 VIDEO ANALYTICS

# Specifications

CERTIFICATIONS / RATINGS <sup>7</sup>		[OPTIONS]
ATEX / IECE / UKCA <sub>x</sub>	ATEX II 2GD, Ex db IIB/IIC Gb; Ex tb IIIC Db; T4 / T5 / T6 EN60079-0, EN60079-1, EN60079-31, IEC60079-0, IEC60079-1, IEC60079-31	
ATEX / IECEx Certified Temperature	-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)	
CSAus Class / Division	Class I, Div 1, Groups A, B, C, D; Class II, Div I, Groups E, F, G; T4 / T5 / T6	
CSAus Class / Zone	Class 1, Zone 1, AEx db IIC Gb; Zone 21, AEx tb IIIC Db; T4 / T5 / T6	
CSAus Standards	FM3600, FM3615, FM3616, UL50, UL50E, UL60950-1 UL60079-0, UL60079-1, ANSI60079-31	
CSAus Certified Temperature	-55°C to +40°C (T6), +50/55/60°C (T5), +70°C (T4)	
CSA Zone	Ex db IIC Gb; Ex tb IIIC Db; T4 / T5 / T6	
CSA Standards	C22.2 No. 0-10, C22.2 No. 60079-0, C22.2 No. 60079-1 C22.2 No. 60079-31, C22.2 No. 60950-1, IEC60529 C22.2 No. 94.1-07, C22.2 No. 94.2-07	
CSA Certified Temperature	-55°C to +40°C (T6), +50/60°C (T5), +70°C (T4)	
ENC (US & Can.)	FCC CFR47 Part 15 Class A ICES-003 Class A	
EMC	EN61000-6-2, EN 61000-6-4 Class A limits	
CE / UKCA	IEC62368-1, IEC60825-1	
DNV	TAA00001M2 Iss 3	
INMETRO	BRA 21.GE0018X	
ENVIRONMENTAL		
Operating Temperature	-45°C to +70°C / -49°F to +158°F	
Storage Temperature	-45°C to +80°C / -49°F to +176°F	
Ingress Protection	IP66 & IP68 (30 m Submersion for 4 hrs) 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	HD grade toughened glass, thermostatically operated demister [Wiper <sup>2</sup> ]	
Mounting Orientation	Upright or inverted	
Mounting Base	1 x Ø 12.5 mm / 0.49" fixing hole	
Dimensions <sup>*1</sup> (W x D x H)	179 x 310 x 235 mm / 7.05" x 12.21" x 9.25"	
Weight <sup>*1</sup>	8 kg / 17.6 lb	
Cable Gland Entries	1 x M20	
ELECTRICAL		
Input Power Options	24 V AC/DC (±10%) 50/60 Hz 11 VA Operating	
Power Consumption <sup>*1</sup>	27 VA Operating (with heater) 30 VA Max	
Wash Control <sup>*1/4</sup>	Volt free switched output (24 V 0.75 A max)	
Auxiliary Inputs <sup>*3</sup>	[1 x contact closure input]	
Relay Outputs <sup>*3</sup>	1 x volt free switched output (24 V 0.75 A max)	
Audio <sup>*3</sup>	[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) Imaging settings [Alarm input] Relay outputs Event metadata
IR Lamp Control*1	Manual/auto control of a connected IR lamp
IR Focus Compensation*1	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 30) IPS
GOP Structure	Variable
Region of Interest	Ability to crop a selected area of the image source for encoding. Option to increase/decrease encode quality of configurable image regions.

AUDIO ENCODING*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

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. \*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

C3 - A B C - E - F G H J

(Example) C3 - 1 F 33 - W - L 5 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

E Ethernet Base-T

### G - BASE/MOUNTING TYPE

Standard fixed mounting

5 Alternative fixed mounting

### F - TECHNOLOGY SERIES

L LE Series, IP encoder