## COEX<sup>™</sup> C3000 4K LE IP Fixed Camera Station with Integrated Junction Box

The COEX<sup>™</sup> C3000 4K LE IP Fixed Camera Station with Integrated Junction Box has been 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, they are ideal for oil and gas, marine, and industrial installations.

This advanced camera station combines 4K video with a 22x optical zoom to deliver high-quality image and detail capture.

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 FEWS3 wash systems
- IR lamp\*1
- Various voltage options 24 V AC/DC and (100 to 240) V AC
- Fiber and copper 3-port switch\*1
- Ethernet over coax media converter
- Video analytics\*9





## **Specifications**

CERTIFICATIONS / RATINGS*7		[OPTIONS]			
ATEX / IECEx / UKCA	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 / UKCA Certified	-55°C to +50°C (T6), +55/60°C (T5), +70°C (T4)				
Temperature 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 I, Zone 1, AEx db IIC Gb; Zone 21, AEx db IIC Db; T4 / T5 / T6				
CSAus Standards	FM3600, FM3615, FM3616, UL50, UL50E, UL62368-1 UL60079-0, UL60079-1, UL60079-31				
CSAus Certified Temperature	-55 to +50°C (T6), +55/60°C (T5), +70°C (T4)				
EMC	EN61000-6-2, EN 6100	00-6-4 Class A limits			
EMC (US)	FCC CFR47 Pa	rt 15 Class A			
CE / UKCA	IEC62368-1, IEC60825-1				
DNV	Pending				
INMETRO	BRA 21.G	E0018X			
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 (30m Submersion for 4 hrs) to IEC60529, Type 6 Enclosure				
Vibration	0.7g to IEC60068-	2-6 & IEC60945			
Salt Mist	IEC60068-2-52 & IEC60945 Section 8.12				
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]				
Mounting Orientation	Upright or inverted				
Mounting Base	1 x Ø 13.5 mm / 0.53" fixing hole				
Dimensions <sup><math>*1</math></sup> (W x D x H)	348 x 310 x 219 mm / 13.70" x 12.21" x 8.62"				
Weight*1	17 kg / 37.5 lb				
Cable Gland Entries <sup>*3</sup>	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 <sup>*3</sup>	[1 x contact closure input]				
Relay Outputs*3	1 x volt free switched output (24 V 0.75 A max)				
	[Line Input/Output]				

CAMERA OPERATION	
Preset Memory	128 user programmable preset positions (zoom, focus)
Wash/Wipe <sup>*1</sup>	[Optional wash/wipe with auto-wiper off]
	Zoom and focus control, preset store/recall, auxiliary controls (wash/wipe/lamps)
ONVIF Control Features	[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 Direct to SD card
Local Recording <sup>*8</sup>	Synectics Intelligent Edge Recording (SIER)
DAY/NIGHT CAMERA / LENS	
Image Sensor	1/1.8" Progressive CMOS sensor
Signal System	4K 2160p 25/30 fps, FHD 1080p 25/30/50/60 fps
Effective Pixels	3864 (H) x 2180 (V), Approximately 8 megapixels
Zoom Range	22x optical zoom
	(up to 220x with digital zoom)
Focal Length/Aperture Angle of View (H)	6.4 mm (wide) to 138.5 mm (tele), F1.5 to F3.4 64° (wide) to 3° (tele)
Minimum Illumination	
(Color) Minimum Illumination	0.04 lux
(Mono)	0.002 lux
Wide Dynamic Range	True WDR (120 dB)
Electronic Shutter Noise Reduction	Auto (1/1 to 1/10,000 s) 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 <sup>*6</sup>	64 kb/s to 20.48 Mb/s
Image Resolution <sup>*6</sup>	Stream 1: UHD (3840 x 2160), QHD+ (3200 x 1800), 1080p (1920 x 1080), SXGA (1280 x 1024), 720p (1280 x 720) Stream 2/3/4 additional resolutions: XGA (1024 x 768), SVGA (800 x 600), D1 (720 x 480), VGA (640 x 480), (352 x 240), (320 x 240)
Image Rate <sup>*6</sup>	4K (1 to 30), 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*3	
Compression Standards	uLAW, ALAW, AAC, PCM 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps, uLAW (64 Kbps), ALAW (64 Kbps), AAC (128 Kbps), PCM (128 Kbps), PCM
Stream Bitrate	(256 Kbps), PCM (384 Kbps), and PCM (768 Kbps)
NETWORK DEVICE	
Interface Options <sup>*5</sup>	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 <sup>*8</sup>	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) Permission based password protected web interface and ONV/E/PTSP services. HTTPS support. HTTP disable
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	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 mar	nagement with terr	nination capacity for	spare fiber cores	
Features		[Link loss forwardi	ng, fault detection]		Link loss forwardi	ng, fault detection
[MEDIA CONVERTER]*7			Ethernet	over Coax		

	Ethemet over Coax				
	Auto-optimizing for 75 Ω coaxial cable:				
Connectivity	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. MJPEG limited to HD resolution. \*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	C - E -	F G	H	J	
(Example)	C3 - 1 F 22	2 - W -	L 3	E	X	
A - CAMERA HOUSING SIZE						J - SPECIAL
1 Size 1 camera housing						Standard build
						X Special build
B - FIXED/PTZ						
F Fixed						H-OUTPUT TRANSMISSION TYPE
						C Coax
						U UTP
C - DAY/NIGHT CAMERA						E Ethernet Base-T
22 4K UHD, 22x zoom						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
E-WIPER						L LE Series, IP encoder
Without wiper						
W Standard wiper						

B Brush wiper



Reference Number: 06\DS 0617 lss 2

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