COEX™ C3000 HD LE IP Fixed Camera Station with Integrated Junction Box

The COEX™ C3000 HD 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 Full HD video with a 33x 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
- 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

































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 Temperature	-55°C to +50°C (T6), +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 I, Zone 1, AEx db IIC Gb; Zone 21, AEx tb IIIC 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 61000-6-4, Class A limits	
EMC (US)	FCC CFR47 Part 15 Class A	
CE / UKCA	IEC62368-1, IEC60825-1	
DNV	TAA00001M2 lss 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 (30m Submersion for 4 hrs) to IEC60529, Type 6 Enclosure	
Salt Mist	IEC60068-2-52 & IEC60945 Section 8.12	
Vibration	0.7g 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*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)	348 x 310 x 219 mm / 13.70" x 12.21" x 8.62"
Weight*1	17 kg / 37.5 lb
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 30) 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
Stream Bitrate	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*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	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 mai	nagement with tern	nination capacity for	spare fiber cores	
Features		[Link loss forwardi	ng, fault detection]		Link loss forwardi	ng, fault detection

[MEDIA CONVERTER]*7	ERTER] ⁺⁷ Ethernet 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. *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 Ε G 33 W 3 (Example) A - CAMERA HOUSING SIZE J-SPECIAL Size 1 camera housing Standard build X Special build B-FIXED/PTZ H-OUTPUT TRANSMISSION TYPE Fixed C Coax E Ethernet Base-T C-DAY/NIGHT CAMERA Singlemode fibre FHD, 33x zoom 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 \bigvee Standard wiper Brush wiper

