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

The COEX™ C3000 HD LE IP PTZ 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.

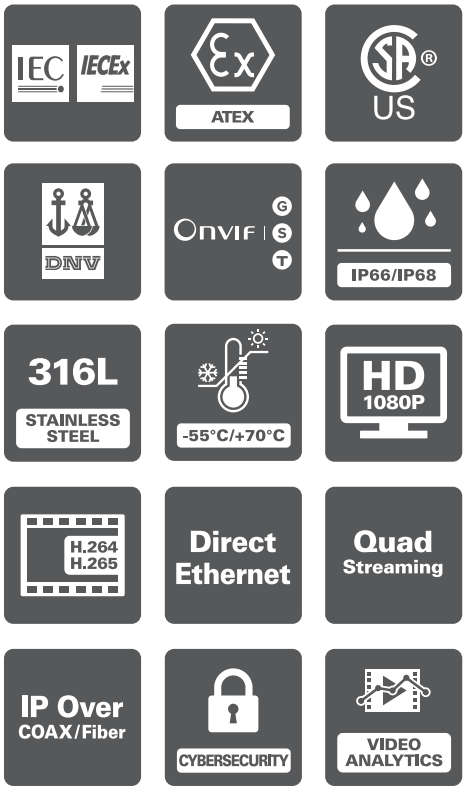
This advanced camera station combines Full HD video with a 33x optical zoom to deliver high-quality image and detail capture.

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
- Continuous rotation
- Integral fiber optic transmission
- 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



SYNECTICS

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 +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 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°C to +40°C (T6), +50/55/60°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 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[*2]]
Pan Turning Circle	Ø 560 mm / 22.05"
Tilt Turning Circle	Ø 360 mm / 14.17"
Mounting Orientation	Upright or inverted
Mounting Base	8 x M8 tapped holes, equispaced on a 4" (101.6 mm) P.C.D.
Dimensions[*1] (W x D x H)	375 x 310 x 443 mm / 14.76" x 12.21" x 17.44"
Weight[*1]	31 kg / 68.3 lb
Cable Gland Entries[*3]	3 x M20 / [3 x M25] / [3 x ½" 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 89 VA Operating (with heater) 115 VA Max	11 VA Quiescent 71 VA Operating 84 VA Operating (with heater) 100 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	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)	
Preset Accuracy	<0.05°	
Wash/Wipe*1	[Optional wash/wipe with auto-wiper off]	
ONVIF Control Features	PTZ control, 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 152 mm (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

[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	>11db	>16db	> 26dB	>19db	>13db	>13db
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	

[ETHERNET EXTENDER]*5	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

	C3	-	A	B	C	-	E	-	F	G	H	J
(Example)	C3	-	1	V	33	-	W	-	L	3	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

33	FHD, 33x zoom

E - WIPER

	Without wiper
W	Standard wiper
B	Brush wiper

F - TECHNOLOGY SERIES

L	LE Series, IP encoder

G - BASE/MOUNTING TYPE

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

H - OUTPUT TRANSMISSION TYPE

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

J - SPECIAL

	Standard build
X	Special build

MANUFACTURER OF CAMERA STATIONS

Specifications subject to change. E & OE.
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06\DS 0677 Iss 4