

COEX™ C3000 HD IP Fixed Camera Station

The COEX™ C3000 HD 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 premium-performance camera station combines Full HD (1080p) video with 30x optical zoom to provide exceptional image quality even in low light conditions.

Featuring the latest encoding technology (2nd generation IP encoder), the camera station is capable of triple-stream H.264 and H.265 encoding for simultaneous live view and recording.

The C3000 HD IP Fixed Camera Station has cybersecurity measures built-in, including encrypted video streaming, HTTPS, and 802.1x protocols.

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

Options

- Integral wiper
- COEX FEWS3 wash systems
- IR lamp*¹

Specifications

CERTIFICATIONS / RATINGS ⁵		[OPTIONS]
ATEX / IECEx / UKCA	ATEX II 2GD, Ex db IIB/IIC Gb; Ex tb IIIC Db; T4 / T5 / T6 EN60079-0, EN60079-1, EN60079-28, EN60079-31, IEC60079-0, IEC60079-1, IEC60079-28, 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)	
CSA Class / Division	Ex db IIC Gb; Ex tb IIIC Db; Class II, Div 1, Groups E, F, G; Class III, Div 1; T4 / T5 / T6	
CSA Standards	C22.2 No. 0, C22.2 No. 60079-0, C22.2 No. 60079-1, C22.2 No. 60079-31, C22.2 No. 62368-1, IEC60529, C22.2 No. 94.1, C22.2 No. 94.2	
CSA Certified Temperature	-55°C to +50°C (T6), +60°C (T5), +70°C (T4)	
EMC	EN61000-6-2, EN 61000-6-4, Class A limits	
EMC (US & Can.)	FCC CFR47 Part 15 Class A ICES-003 Class A	
CE / UKCA	IEC62368-1, IEC60825-1	
DNV	TAA00001M2	
INMETRO	BRA 21.GE0018X	
C-TICK	On Request	
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	0.7 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]	
Mounting Orientation	Upright or inverted	
Mounting Base	1 x Ø 12.5 mm / 0.49" fixing hole	
Dimensions ^{*1} (W x D x H)	179 x 310 x 235 mm / 7.05" x 12.21" x 9.25"	
Weight ^{*1}	8 kg / 17.6 lb	
Cable Gland Entries	1 x M20	
ELECTRICAL		
Input Power Options	24 V AC/DC (±10%) 50/60 Hz 8 VA Quiescent 11 VA Operating	
Power Consumption ^{*1}	24 VA Operating (with heater) 27 VA Max	
Wash Control ^{*1}	Volt free switched output (24 V 0.75 A max)	
Auxiliary Inputs ^{*3}	1 x contact closure input (5 V pull up) [up to 4 available on request]	
Relay Outputs ^{*3}	1 x volt free switched output (24 V 0.75 A max) [up to 2 available on request]	
Audio ^{*3}	[Line Input]	
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/auto focus), wash/wipe and lamps control mappable to ONVIF presets for control systems that have no support for auxiliary commands, alarm inputs, and relay outputs	
IR Lamp Control ^{*1}	Manual/auto control of a connected IR lamp	
IR Focus Compensation ^{*1}	Manual/auto control of IR focus compensation and automatic compensation of focus preset positions	

DAY/NIGHT CAMERA / LENS

Image Sensor	1/2.8" Progressive scan Exmor CMOS sensor
Signal System	1080p 25/30/50/60 FPS
Effective Pixels	Approximately 2.13 megapixels
Zoom Range	30x zoom (up to 360x with digital zoom)
Focal Length / Aperture	4.3 mm (wide) to 129 mm (tele), F1.6 to F4.7
Angle of View (H)	63.7° (wide) to 2.3° (tele)
Minimum Illumination (50IRE, ICR OFF)	0.1 lux (1/30 s, Slow Shutter Off, High Sensitivity Off), 0.01 lux (1/30 s, Slow Shutter Off, High Sensitivity On) 0.013 lux (Slow Shutter 1/4 s, High Sensitivity Off), 0.0012 lux (Slow Shutter 1/4 s, High Sensitivity On)
Minimum Illumination (50IRE, ICR ON)	0.006 lux (Slow Shutter Off, High Sensitivity Off), 0.0015 lux (Slow Shutter Off, High Sensitivity On)
Minimum Illumination (30IRE, ICR ON)	0.0008 lux (Slow Shutter 1/4 s, High Sensitivity On)
Wide Dynamic Range	On/off, 130 dB @ 1080p30
Electronic Shutter	Auto (1/1 to 1/10,000 s, 22 steps)
Signal/Noise Ratio	> 50 db (weight on)
Features	Digital zoom on/off, auto/manual focus, auto/manual iris, auto/manual IR cut filter remove (ICR), auto exposure (AE), automatic gain control (AGC), auto white balance (AWB), backlight compensation (BLC), auto slow shutter, wide dynamic range (WDR), anti-shake, defog, on-screen text display (OSD), image invert
Image Stabilization	EIS

VIDEO ENCODING

Compression Standards	H.264 (MPEG4 part 10/AVC) high, main, base profiles H.265 (MPEG-H part 2/HEVC), MJPEG
Bitrate Mode	Constant Bitrate (CBR), Variable Bitrate (VBR)
Encoding Capability	Up to 3 independently configurable encoded video streams
Stream Bitrate*4	100 kb/s to 25 Mb/s
Image Resolution*4	Full HD 1080p (1920 x 1080), 720p (1280 x 720), D1 (720 x 576/480), 4CIF (704 x 576), CIF (352 x 288)
Image Rate*4	HD (up to 60 IPS)
GOP Structure	I-frame only, 5 to 240 frames
Region of Interest (ROI)	Configurable per encoded video stream, ability to crop a selected area of the image source for encoding (variable resolution and aspect ratio)

AUDIO ENCODING

Compression Standards	ARM AACLC, ARM AACLC MPEG2, ARM AACHE, ARM AACHE V2
Sample Rate	48 kHz, 44.1 kHz, 32 kHz, 16 kHz
Stream Bitrate	12 to 384 kb/s (AACHE and AACHE V2 32 to 64 kb/s)

NETWORK DEVICE

Interface Options	Ethernet (100Base-T, 10-Base-T), Auto/full/half duplex, Auto/10/100, Configurable MTU Size
Protocols	TCP/IP, UDP, ICMP, DHCP, DNS, HTTP, HTTPS, NTP, RTSP/RTP/RTCP, TSRTSP, RTMP, RTMPS, SRT, IGMP, SNMP, SYNS, SSL, TLS, 802.1x (EAP)
Control Protocol	SYNS, ONVIF (Profile S, T compliant)
Video Stream Delivery	RTSP/RTP (Unicast: UDP/TCP, Multicast UDP), TSRTSP, RTMP, RTMPS, SRT
Network Discovery	SYNS, WS-Discovery (ONVIF)
Device Security	Multiple users and 7 access levels protecting access to the web interface, ONVIF and RTSP services, HTTPS support, HTTP disable, 802.1x (EAP), video streaming disabled until change of default password, unicast stream disable
Supported Internet Browsers	Chrome/Firefox/IE/Edge (No Active-X browser components required)
System Maintenance	Field upgradeable firmware, diagnostic logs Hardware system supervisor providing temperature management, cold-start, auto-shutdown and watchdog control

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.

PART CODE STRUCTURE

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

(Example) C3 - 1 F 75 - W - E 5 E X

A - CAMERA HOUSING SIZE

1 Size 1 camera housing

B - FIXED/PTZ

F Fixed

C - DAY/NIGHT CAMERA

75 HD (1080p), 30x zoom

D - THERMAL IMAGING MODULE

N/A

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

E 2nd Gen, IP encoder

Synectics
 sales@synecticsglobal.com
synecticsglobal.com

Specifications subject to change. E & OE.
 Copyright © Synectic Systems Group Limited 2021. All Rights Reserved.

MANUFACTURER OF

 CAMERA STATIONS

Reference Number:
 06DS 0531 Iss 3